State of Maryland Department of Health and Mental Hygiene

Maryland 2008 Statewide Pan-Flu Exercise

Exercise Summary
And
After Action Report (AAR)

MARYLAND
DEPARTMENT OF HEALTH & MENTAL HYGIENE

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Executive Summary

Public Health and Homeland Security preparedness involves a cycle of outreach, planning, capability development, training, exercising, evaluation, and improvement. Successful exercises lead to an ongoing program of process improvements. This after-action report (AAR) is intended to assist the Maryland Department of Health and Mental Hygiene (DHMH) Office of Preparedness and Response (OP&R) and all participants in striving for preparedness excellence by analyzing exercise results:

- Identifying strengths to be maintained and built upon
- Identifying potential areas for further improvement
- Recommending exercise follow-up actions

The suggested actions in this AAR should be viewed as recommendations only. In some cases, participants may determine that the benefits of implementation are insufficient to outweigh the costs of implementing changes and improvements to emergency preparedness, response and recovery. In other cases, they may identify alternative solutions that are more effective or efficient. Each participant should review the recommendations and determine the most appropriate action and resources (e.g., time, staff, and funds) for implementation of improvement actions.

The State of Maryland recognizes its responsibilities to protect the public from and mitigate the consequences of hazards associated with public health emergencies, including the necessity for a properly integrated response in the event of such an incident. With those responsibilities in mind, the Maryland 2008 Statewide Pan-Flu Exercise focused on the overall response and decision-making process, integration, and coordination with responding hospitals, public health departments, public safety agencies, and private critical infra-structure organizations.

The modified functional exercise with embedded full-scale components was played out across the State over four (4) days and tested the following priorities, operational areas and functions:

- DHMH Coordination/Command Center and Continuity of Operations Plan
- Health and Medical Surge (Facilities, Personnel, Equipment and Supplies)
  - Medical Surge – Alternate Care Sites
  - Strategic National Stockpile/Receipt Staging and Storage
  - Enhanced Surveillance
  - Governor's Wellmobiles
  - Laboratory Surge
  - Countermeasure Response Administration
  - Emergency Medical Services – Emergency Medical Dispatching
  - Emergency Medical Services – Transport Diversion Protocol
  - Emergency Medical Services On-Scene Triage and Assessment Protocol
- Personal and Community Preparedness
  - Community Emergency Response Teams (CERT)
  - Critical Infrastructure

    - Internal Countermeasure Distribution
    - Educational Facilities
    - Volunteer Activation
    - Joint Information Center – Public Information
- Interoperable Communications
- Mass Fatality Management
- Vulnerable Populations

Many tasks were evaluated throughout exercise play consisting of agency specific plans, policies and procedures and selected items from the Department of Homeland Security's Target Capabilities List (TCL). Many strengths and areas for improvement were identified and are noted in Chapter 4 of this AAR, *Analysis of Functional Areas and Operations.* Several key items have been noted below and provide a summary of the task analysis.

Key Strengths

Key strengths identified during the exercises included the following:

- Incident Command Systems were effectively established at local health departments and health care facilities across the state as well as within participating Critical Infrastructure, Key Resources and Critical Manufacturing (CI/KR/CM).

- HAM radio operations proved to be an effective back-up communication system for hospital to hospital and state to local situations.

- The process of receiving the Strategic National Stockpile (SNS) materials by the State at the Receiving Storage and Staging (RSS) site, receiving supply requests, filling requests, and shipping material to the local level proved to be a well planned and efficient operation.

- DHMH and all partners (health departments, hospitals, EMS, Emergency Management Agencies, private critical infrastructure organizations etc.) were able to maintain situational awareness by way of the conference calls and statewide email alerts.

- There was active participation and integration of response activities by Critical Infrastructure, Key Resources and Critical Manufacturing through the use of a DHMH-CI/KR/CM Liaison assigned to the DHMH Coordination/Command Center.

- WebEOC is a valuable asset to the state and all local jurisdictions. It provided real-time tracking of resources, requests, and events.

Areas for Improvement

Some areas for improvement identified during the exercises include:

- There are some limitations to the conference call bridge that is currently in operation, during the exercise solutions were made on the fly, but a more robust system would be recommended.

- Although there seems to be a high level of Incident Command System (ICS) knowledge across the state, there is some confusion when it comes to Incident Action Plans; how to complete and how to communicate it to personnel.

- Many systems across the state have begun or completed planning for vulnerable populations however; there is a gap at the operational level with such issues as: documents in multiple languages, translators, accommodations for deaf and blind, and handling of an influx of physically disabled citizens.

- Mass fatality management is an area that Maryland, local jurisdictions and healthcare facilities need to complete and finalize policies, procedures and formal plans, train necessary personnel, and exercise,.

Chapter 1: Exercise Overview

Exercise Name

Maryland 2008 Statewide Pan-Flu Exercise

Duration

4 Days

Exercise Dates

June 17, 18, 19 – Functional Exercise / June 20th – School Tabletop Exercise

Sponsors

- US Department of Health and Human Services (HHS)
    1. Centers for Disease Control and Prevention, Cooperative Agreement for Public Health Preparedness
    2. Office of the Assistance Secretary for Preparedness and Response, Hospital Preparedness Program
- Office of Preparedness and Response (OP&R), Maryland Department of Health and Mental Hygiene (DHMH)

Types of Exercises

Full-Scale / Functional / Table Top

Focus

_X_ Response
_x_ Recovery
___ Prevention
___ Other

Classification

___ Unclassified (U)
_X_ For Official Use Only (FOUO)
___ By Invitation Only (IO)

Scenario

_X_ Pandemic Influenza

Participants

Local Agencies	
Allegany County Community Mitigation Team	Harford County Health Department
Allegany County Department of Homeland Security and Public Safety	Harford County 911 Call Center
Allegany County Health Department	Howard County CERT
Allegany County Sheriff's Department	Howard County Health Department
American Red Cross	Kent County Health Department
Anne Arundel County Health Department	Montgomery County Healthcare Collaborative on Emergency Preparedness
Anne Arundel County Emergency Management	Montgomery County Fire Rescue Service
Baltimore City Health Department	Montgomery County Health Department
Baltimore County Emergency Management	Montgomery County Homeland Security
Baltimore County Health Department	Montgomery County 911 Call Center
Calvert County Emergency Management	Prince Georges Co Emergency Management
Calvert County Health Department	Prince Georges County EMS/Dispatch
Carroll County Health Department	Prince Georges County Health Department
Caroline County Health Department	Prince Georges County 911 Call Center
Caroline County 911 Call Center	Queen Anne's County Health Department
Cecil County Emergency Services	Queen Anne's County 911 Call Center
Cecil County Health Department	Somerset County Health Department
Charles County Health Department	St. Mary's EOC
City of Laurel	St. Mary's Health Department
Community Emergency Response Teams (CERT)	Talbot County Health Department
Cumberland City Police Department	Washington County Health Department
Dorchester County Health Department	Washington County 911 Call Center
EMA Command Centers	Western Maryland Health System
Frederick County Health Department	Wicomico County Health Department
Frederick County 911 Call Center	Worchester County Emergency Management
Garrett County Health Department	Worcester County Health Department
Harford County Emergency Management	
Note: Several paid and volunteer EMS organizations from across Maryland participated in the EMS On-Scene Pan Flu Protocol review and Tabletop Exercise.	
State Agencies	
Maryland Air Guard	Maryland Receiving, Storage and Staging (SNS Warehouse)
Maryland Defense Force	Maryland Department of Transportation
Maryland Department of Disabilities	Maryland Department on Aging
Maryland State Department of Education	Maryland Emergency Management Agency
Department of Health and Mental Hygiene (DHMH)	Maryland Judiciary
DHMH, Office of Preparedness and Response	Maryland National Guard
DHMH, Epidemiology Disease Control Program	Governor's Wellmobiles
DHMH, Laboratories Administration	Maryland Anatomy Board
DHMH, Developmental Disabilities Administration	Governor's Office on Service and Volunteerism
DHMH Mental Health Administration	Maryland Board of Pharmacy
DHMH, Office of the Chief Medical Examiner	Maryland Institute of Emergency Medical Services System (MIIEMSS)
Maryland Department of Natural Resources Police	Maryland Transportation Authority Police
Maryland State Police	

Federal Agencies	
Centers for Disease Control and Prevention (CDC)	Ft. Meade US Army
CDC Office of the Strategic National Stockpile (SNS)	United States Marshalls Service
CDC Countermeasure Response Administration (CRA)	Veterans Administration
Health Care Providers and Organizations	
American Red Cross	Johns Hopkins M.I.
Anne Arundel County Medical Center	Laurel Regional Hospital
Atlantic General Hospital	Levindale Center
Baltimore Medical System	McCready Hospital
Baltimore Washington Medical Center	Maryland Health System
Braddock Medical Group	Mercy Medical Center
Calvert Memorial	Northwest Hospital
Carroll Hospital General	Peninsula Regional Hospital
Chester River Hospital Center	Pharmacare
Children's Medical Group	Potomac Center
Doctor's Hospital	Potomac Ridge Behavioral Health
Dorchester General Hospital/Shore Health	Prince George's Hospital
Easton Memorial Hospital/Shore Health	Sheppard 's Pratt Hospital
Franklin Square Hospital	Shore Health System
Frederick Memorial Hospital	Sinai Hospital
Ft. Washington Medical Center	St. Agnes
Garrett County Hospital	St. Joseph's Medical Center
Greater Baltimore Medical Center	St. Mary's Hospital
Harford Memorial Hospital	St. Matthew's Church
Holy Cross Hospital	Suburban Hospital
Howard County General	Union Hospital of Cecil County
JHU Bayview Medical Center	Union Memorial Hospital
JHU Community Physician Sites	University of MD Medical Center
JHU Home Healthcare	Upper Chesapeake Medical Center
JHU Hopkins Hospital	VA Medical Center – Baltimore City
State Hospitals, Residential and Day Program Core Service Providers	
Brandenburg Center	Spring Grove Hospital Center
Carter Center	Regional Institute for Children and Adults, Baltimore
Deers Head Hospital Center	Regional Institute for Children and Adults, Rockville
Holly Center	Walter P Carter Center
Potomac Center	Western Maryland Hospital Center
Springfield Hospital Center	

Home and Community Based Service Providers	
Bay Shore Services, Salisbury, MD	Shorehaven Inc., Elkton, MD
Bayside Community Network, Elkton, MD	Shura, Inc. Baltimore, MD
Deaf Independent Living Association, Salisbury, MD	Worcester County Development Center, Newark, MD
DHMH, Developmental Disabilities Administration, Central Maryland Regional Office	
Epilepsy Assoc. of Eastern Shore, Salisbury, MD	
Critical Infra-structure, Key Resources and Critical Manufacturing	
Constellation Energy	New England Motor Freight
W R Grace & SBIMAP	Provident Bank
Lockheed Martin	SRA International
McCormick Company	Verizon
Education	
Allegany County Board of Education	Maryland State Department of Education
Anne Arundel County Schools	Montgomery County Schools
Baltimore City Schools	Prince Georges County Schools
Baltimore County Schools	Potomac Ridge Schools
Calvert County Schools	Queen Anne County Schools
Caroline County Schools	Somerset County Schools
Charles County Schools	St. Mary's College
Dorchester County Schools	St. Mary's County Schools
Frederick County Schools	University of MD, School of Nursing
Garrett County Schools	Wicomico County Schools
Harford County Schools	Kent County Schools
Howard County Schools	

State Support Organization

- Maryland Department of Health and Mental Hygiene
  - Office of Preparedness and Response

Exercise Overview

The Maryland 2008 Pan-Flu Exercise was a four (4) day statewide exercise that focused on the public health/medical response, decision-making processes, and integration/coordination with local and state public agencies and private response partners. The exercise was designed to provide a realistic scenario of a naturally occurring Pandemic Influenza with a twelve week wave. The exercise was a no-fault environment, reinforcing operational and functional strengths while identifying areas for improvement. To capture the data needed for such improvement, evaluators observed and gathered information to assess the performance of participants during the exercise.

Exercise Design Activities

The exercise was developed through the formation of an exercise planning committee headed by the DHMH Office of Preparedness and Response (OP&R). Overall exercise goals and objectives were selected to meet the CDC Public Health Emergency Preparedness (PHEP) Cooperative Agreement, HHS Office of the Assistant Secretary for Preparedness and Response (ASPR) Hospital Preparedness Program Exercise Guidelines and Requirements and to build on the 2007 Maryland Statewide Pan Flu Exercise corrective actions.

Interested participants were invited to send trusted agents to engage and share in the Exercise design. The design committee divided into sub-committees based upon their desired exercise participation. These sub-committees developed the "Master Scenario Events List" for their respective functional aspects to be tested and evaluated during the exercise. In addition, the sub-committees identified performance criteria and exercise injects. Subsequently, they developed Exercise Evaluation Guides (EEGs) to be used during the exercise.

Not all participants assisted the subcommittees during the design process; therefore all materials developed by the sub-committee were made available to all participants.

Given the large number organizations and agencies interested in exercise participation, it was not possible to obtain or assign enough contractor provided Observer-Evaluator-Controllers (OECs) to every participant. Exercise sites provided with contractor OECs were designated as primary sites while those with self provided OECs were designated secondary sites. To ensure consistency in evaluation during the exercise, both primary and secondary site OECs received similar training on the evaluation tools.

A pre-exercise meeting of all participants was held two weeks before the exercise start. The purpose of this meeting was to allow all participants to understand the exercise goals and objectives for all aspects being tested and evaluated during the exercise.

As different sites completed their play during the exercise period, a hot wash was conducted to discuss their exercise response activities. The purpose of the hot wash was to allow participants and players to voice their thoughts and observations related to their participation.

Following the cessation of all exercise activities on the last day, all participants attended a draft AAR meeting. During this meeting all primary participant sites gave short presentations which included: a brief review of their goal and objectives, an overview of what went well and what needs improvement.

Exercise Personnel

Exercise personnel were assigned the following roles for the purpose of the exercise:

- **Exercise Design and Development**. Representatives from all participating agencies who worked to design and develop the exercise goals and objectives for the respective operational and functional areas exercised throughout the exercise. These participants worked in sub-committees to develop specific Master Scenario Exercise Lists (MSELs) as well as related injects and performance criteria in the Exercise Evaluation Guides (EEGs).

- **Players.** All personnel who had an active role in the exercise response during the Pandemic Influenza scenario. Players initiated actions that controlled and mitigated the simulated emergency.

- **Controllers/Evaluators.** Individuals, who planned and managed the exercise, set up and operated the exercise sites, and substituted for response personnel and agencies that were not actually participating in the exercise. Controllers provided key data to players and prompted or initiated certain events via informational injects to ensure exercise flow. The Controllers also acted as Evaluators completing exercise-related assessment worksheets.

- **Observers.** Individuals who observed selected segments of the exercise. Observers did not participate in exercise play, and they did not have exercise control or evaluation functions.

Total Number of Exercise Personnel:

Players……..... 4,000+
Contractor Controller/Evaluators/Observers 50
Peer Controller/Evaluators/Observers 100
Exercise Design and Development 75-100

Exercise Evaluation

The goal of exercise evaluation is to validate strengths and identify areas for improvement for exercise participants. This was accomplished by observing exercise play, collecting supporting data, analyzing the data to compare performance against expected outcomes, and recommending changes to existing procedures, plans, staffing, equipment, methods of communication and other areas.

The exercise was evaluated using the methodology set forth in the Department of Homeland Security (DHS) Homeland Security Exercise and Evaluation Program (HSEEP). All evaluators attended Controller/Evaluator training prior to the exercise to ensure a consistent and comprehensive evaluation process statewide. Evaluators utilized Exercise Evaluation Guides (EEGs) to collect observations and analyze outcomes against the Target Capabilities List (TCL)

and agency specific plans, policies and procedures. Following the exercise each site conducted a player "hot-wash" to capture additional participant feedback self-assessment data. The EEGs, hot-wash data and evaluators' notes were compiled and are the basis for this AAR.

All exercise objectives were referenced to grant requirements and the DHS Target Capabilities List. The following is a list of Exercise Evaluation Guides (EEGs) that were utilized throughout the exercise.

- Communications
- Continuity of Operations
- Critical Infrastructure Protection
- Critical Resource Logistics and Distribution
- Economic and Community Recovery
- Emergency Public Information
- Emergency Operations Center Management
- Epidemiological Surveillance and Investigation
- Fatality Management
- Incident Management
- Isolation and Quarantine
- Mass Care
- Mass Prophylaxis
- Medical Supplies Management and Distribution
- Medical Surge
- Public Health Laboratory Testing
- Responder Safety and Health
- Search and Rescue
- Pre-Hospital Triage and Treatment
- Volunteer Management

Target Capabilities

The following table lists the DHS Target Capabilities List. Those target capabilities addressed in the Maryland 2008 Statewide Pandemic Influenza Exercise are represented by an "X".

Target Capabilities Addressed During the Exercise by Participants

Target Capabilities Being Tested/Evaluated In This Component Of The Exercise		
		Common-Target Capabilities
		• Planning (Preparedness)
	X	• Interoperable Communications (Communications and Information Management)
		Prevent Mission Area-Target Capabilities:
	X	• Information Collection and Threat Recognition (Manage Data Collection)
		• Intelligence Fusion and Analysis (Analyze Intelligence)
	X	• Information Sharing and Collaboration (Disseminate Threat Information)
		• Terrorism Investigation and Apprehension (Investigate and Apprehend Terrorist Suspects)
		• CBRNE Detection (Defeat Weapons)
		Protect Mission Area-Target Capabilities:
	X	• Risk Analysis (Assess Vulnerabilities)
	X	• Critical Infrastructure Protection (Protects Assets & Property)
		• Food and Agriculture Safety and Defense (Safeguard Public Health)
	X	• Public Health Epidemiological Investigation and Laboratory Testing (Safeguard Public Health)
	X	• Citizen Preparedness and Participation (Prepare the Public)
		Respond Mission Area-Target Capabilities:
	X	• On-Site Incident Management (Manage Incident)
	X	• Emergency Operations Center Management (Manage Incident)
	X	• Critical Resource Logistics and Distribution (Manage Incident)
	X	• Volunteer Management and Donations (Manage Incident)
	X	• Worker Health and Safety (Manage Incident)
	X	• Public Safety and Security Response (Manage Incident)
		• Animal Health Emergency Support (Respond to Hazard)
	X	• Environmental Health and Vector Control (Respond to Hazard)
		• Explosive Device Response Operations (Respond to Hazard)
		• Firefighting Operations/Support (Respond to Hazard)
		• WMD/Hazardous Materials Response and Decontamination (Respond to Hazard)
		• Citizen Protection: Evacuation and/or In-Place Protection (Implement Protective Actions)
	X	• Isolation and Quarantine (Implement Protective Actions)
	X	• Search and Rescue (Conduct Search and Rescue)
	X	• Emergency Public Information and Warning (Distribute Public Information)
	X	• Triage and Pre-Hospital Treatment (Provide Medical Care)
	X	• Medical Surge (Provide Medical Care)
	X	• Medical Supplies Management and Distribution (Provide Medical Care)
	X	• Mass Prophylaxis (Distribute Prophylaxis)
		• Mass Care (Sheltering, Feeding, and Related Services) (Provide Mass Care)
	X	• Fatality Management (Manage Fatalities)
		Recover Mission Area-Target Capabilities:
		• Structural Damage Assessment and Mitigation (Rebuild Property)
	X	• Restoration of Lifelines (Restore Lifelines)
	X	• Economic and Community Recovery(Restore Economic Institutions)

Specific Exercise Testing Requirements and Guidelines

Homeland Security Exercise and Evaluation Program (HSEEP)

Department of Homeland Security and Health and Human Services (HHS) awardees are strongly encouraged to design, conduct, and evaluate exercises collaboratively and in accordance with the Homeland Security Exercise and Evaluation Program (HSEEP).

The Homeland Security Exercise and Evaluation Program is a capabilities and performance based exercise program which provides a standardized policy, methodology and terminology for exercise design, development, conduct, evaluation and improvement planning. Adherence to the policy and guidelines presented in HSEEP ensures that exercise programs conform to established best practices, thus helping to provide unity and consistency of effort for exercises at all levels of government. Additional information concerning HSEEP can be found at https://hseep.dhs.gov/pages/1001_HSEEP7.aspx .

Assistant Secretary for Preparedness and Response (ASPR) Hospital Preparedness Program (HPP) Exercise Standards and Requirements:

The ASPR Hospital Preparedness Program exercise guidelines and goals required the testing of Medical Surge during an exercise.

General guidelines for the exercise include:

- Evaluation of medical surge components of the tiered healthcare system (i.e. single facility, community, regional, state and national tiers) in response to a pandemic influenza scenario:
    - the exercise is required to be developed and conducted in coordination with all necessary response partners;
- Develop adequate evaluation tools and methods that can be used and applied across all tiers within the healthcare system that participate in the exercise;
- Develop an After Action Report (AAR) that will identify areas of improvement.

The exercises conducted are expected to include participation by healthcare facilities and providers, public health, emergency management and homeland security. The exercises should demonstrate the coordination between public health and healthcare providers and facilities. The areas in which coordination should be demonstrated include items dealing with risk communication, vaccines/antivirals priorities and distribution, surveillance systems and laboratory testing.

There are several specific exercise goals and objectives identified by the Hospital Preparedness Program. The items in **bold** are goals and objectives expected to be the main focus of this year's exercise.

1. **Use of the Emergency System for Advance Registration of Volunteer Health Professionals (ESAR-VHP) to obtain volunteer health care workers due to likely severe shortages of health care workers. Adequate personnel and staffing needs should be based on CDC's Flu Surge software tool.**
    a. **Will there be authority to waive credentialing requirements?**
    b. **Have you addressed legal issues that may affect your ability to use volunteers or non-credentialed staff?**
    c. **Is changing nurse/patient ratios a reasonable short-term option?**

2. **Staff Support:**
    a. **Exercise vaccination and prophylaxis plans to cover healthcare staff and patients and to address the SNS priority groups and access of the SNS specific for healthcare personnel;**
    b. **Use of additional PPE to protect staff (including masks, gloves, etc.);**
    c. **Mental/behavioral health needs to assist healthcare workers and their families with coping and anxiety of the event.**

3. **Exercise communication systems, plans and procedures to ensure that hospitals, health care systems and public health inform the community about the operating status of hospitals and the triggers for sending a person to the hospital (and any other pertinent information to ensure patient care).**
    a. **What agency/organization will be empowered to release appropriate information?**
    b. **What process is in place to improve the consistency and timeliness of healthcare information to providers and the general public in coordination with other local, state and federal partners?**
    c. **Mass communication messages**

4. **In addition and in coordination with public health, the following should be considered:**
        i. **Risk Communication/messaging to public**
        ii. **Distribution of vaccines and antivirals**
        iii. **Surveillance systems**
        iv. **Laboratory capacity**

5. **Exercise triage and admission plans that would serve to minimize stress on the hospital system and maintain control of the situation.**
    a. **How will patients be transferred?**
    b. **Have you worked with EMS on patient transfer and identified their capacity?**
    c. **Is there a MAA with another entity if EMS in your community becomes overwhelmed and can no longer meet your needs?**
    d. **What other sources could be used for patient transport?**

6. **Use of ICS in the healthcare environment in response to a pandemic influenza outbreak and how the ICS would coordinate with other response partners and healthcare facilities that are also responding simultaneously.**

Additional components for consideration:

7. Maintenance of essential hospital support functions:
    - Ensuring real-time situational awareness of patient visits, hospital bed and intensive care needs, medical supply needs and medical staffing needs.
    - Access/tracking of available beds, ventilators, additional equipment, supplies, and pharmaceuticals needed to treat influenza patients. How will you establish priority to ICU beds and ventilation?
    - Mass fatalities and maximizing morgue capabilities
    - Identify how public health, hospitals and healthcare systems will establish systems for healthcare facility level infection control while allowing necessary personnel access to the facility (security) and Protecting supplies/critical shortage materials and equipment. Have plans been made to enhance security? How many points of entry are there? Who will provide services if law enforcement are severely affected?
    - Financial burden on the healthcare system. Have administrators addressed how they will pay for overtime and loss of regular staff? How will hospitals manage to cover costs until reimbursement occurs? Is the system capable of guaranteeing payment to services and equipment vendors in a crisis condition?

8. Hospitals and health care systems in conjunction with public health partners identify the location, set-up, staffing and operation of alternate care sites during a pandemic.
    a. Who is responsible for developing/setting up an alternate care site?
    b. Will there be adequate staffing, equipment, and services to make the newly available beds usable for patient care?
    c. Will admission/discharge criteria be modified?
    d. How will changes in standards be addressed legally?

CDC Public Health Emergency Preparedness Cooperative Agreement Guidance and CDC Pan Flu Appendix 12: Overarching Exercise Objectives by Priority Area: Pandemic Flu Exercise Guidelines for Medical Surge:

CDC Public Health Emergency Preparedness Cooperative Agreement Guidance requires that awardees conduct joint exercises to meet multiple requirements from various grant programs. This requires coordination of exercise requirements between the CDC Public Health Emergency Preparedness Cooperative Agreement, ASPR HPP, CDC Pandemic Influenza Supplement and Strategic National Stockpile grants.

- Specifically the CDC PHEP CA requires states to exercise different aspects of their Pan Flu Operational Plans submitted and evaluated by the CDC.

Appendix 12 of the CDC PHEP Cooperative Agreement gives overarching exercise objectives by Priority Area. In summary these include:

Mass Vaccination Exercise Objectives

- Ensure that offices responsible for emergency preparedness and immunization at the State and local levels both define roles and responsibilities in regard to pandemic vaccination
- Identify vaccine allocation, distribution, and administration issues related to limited vaccine availability during an influenza pandemic;
- Validate identified procedures to select target/priority groups for vaccination during periods of limited vaccine availability

COOP Exercise Objectives

- Identify and perform critical/essential public health functions during a pandemic influenza outbreak (Target audience: state/local agencies)
- Integrate non-essential personnel into essential agency roles during a pandemic COOP activation (Target audience: state/local agencies)
- Resume routine public health functions between pandemic phases and after a pandemic has ended (Target audience: state/local agencies)

Surveillance/Lab Exercise Objectives

- Validate existing processes at the state and local health department levels to obtain, investigate, and report early cases of pandemic influenza
- Validate existing processes for monitoring severe disease during a pandemic
- Validate existing procedures to exchange specimen-level data electronically
- Validate existing call-down procedures for laboratory staff to report to work

Community Mitigation Exercise Objectives

- Identify potential gaps in existing plans, procedures and protocols for school, business, and public event closure during an influenza pandemic
- Validate the ability of state/local agencies to ensure provisions of essential services and supplies to persons in isolation and quarantine, keeping in mind the special needs of children
- Validate the ability of state/local agencies to identify locations and deploy staff to manage influenza cases and contacts in isolation or quarantine situations

Communication Exercise Objectives

- Validate the ability of state/local agencies to utilize redundant communications systems between intrastate partners and regional multi-agency coordination centers
- Validate existing crisis communication and emergency risk plans to communicate protective actions to the public during an influenza pandemic
- Validate the ability of existing protocols and processes to reach special needs populations with culturally-appropriate and language specific protective actions against pandemic influenza

Antiviral Distribution Objectives

- Increase understanding regarding the roles and responsibilities of all participating agencies related specifically to SNS Medical Countermeasures Distribution during an outbreak of pandemic influenza
- Identify and capture potential gaps in existing plans, policies, procedures, and protocols
- Identify and capture potential gaps in coordination between agencies

Strategic National Stockpile (SNS) Medical Countermeasure Distribution for Pandemic Influenza: Exercise Guide:

In order to satisfy the Strategic National Stockpile exercise requirements of the CDC Public Health Emergency Preparedness Cooperative Agreement Guidance Supplement, Project Areas are required, at a minimum, to conduct one state-level tabletop exercise (TTX) focused on SNS Countermeasure Distribution.

Chapter 2: Exercise Objectives

The Maryland 2008 Pan-Flu Exercise Planning Committee and Functional Sub-Committees developed the following objectives for this exercise:

Community Emergency Response Teams (CERT) (Operations Analysis):

1. To evaluate volunteers and staff with the various stages of a pandemic and how to assess and mitigate the effects of a pandemic in the City.
2. To effectively educate staff and volunteers in what a pandemic is and what agencies become involved in the assessment and mitigation phases of a pandemic.
3. To familiarize staff with Points of Dispensing (PODs), how they receive countermeasures and how a POD operates.
4. To educate the public about pandemic influenza and what measures the City will take to assist in response and mitigation efforts.
5. To utilize CERT for community needs assessment and epidemiological survey and sampling.
6. Use of CERT in conjunction with Medical Reserve Corps for countermeasure dispensing to community residents in home isolation and quarantine using mobile wireless and Geo-Spatial Information Systems (GIS) for real time reporting.

Countermeasure Response Administration (CRA) (Operations Analysis):

1. Establish and implement the CRA system to collect patient level data in an offline, standalone scenario, and the online web interface.
2. Assess the ease of use of the CRA application during a Pandemic Influenza Response.
3. Effectively track and report on anti viral medication dispensed at a public and private agency POD using the CRA application.
4. Effectively track and report on anti viral medication dispensed in a community where social distancing measures are in the implementation stage.

Critical Infrastructure (Operations Analysis):

1. Provide effective Incident Management and Command while collaborating with Critical Infrastructure Companies.
2. Provide effective communications and situational awareness between Critical Infrastructure companies and DHMH
3. Provide internal countermeasures to Critical Infrastructure companies (antivirals) from the Maryland RSS site.
4. Demonstrate receipt, storage, and dispersal procedures by internal Points of Dispensing (POD).
5. Demonstrate the effectiveness of a DHMH-Critical Infra-structure Liaison at the DHMH Coordination/Command Center.

DHMH Command/Coordination Center and Continuity of Operations Plan (COOP) (Operations Analysis):

1. Evaluate the timely response of command center staff to un-announced emergency notifications.
2. Provide effective Incident Management and Command during an Influenza Pandemic.
3. Test workforce sustainment and continuity of operations under decreased staffing levels.
4. Evaluate the command center ability to coordinate an effective recovery operation.
5. Evaluate post-incident debriefing and critical incident stress management.
6. Assess the legal basis for making Public Health directives related to altered scope of practice for healthcare practitioners and changes from the standard of care to sufficiency of care during a pandemic.

Emergency Medical Services (EMS) – Emergency Medical Dispatching (Operations Analysis):

1. Determine the ease of use of the modified Pandemic Influenza Dispatch and Triage protocol by dispatchers.
2. Determine the appropriateness of apparatus dispatched based on the case presentations during EMS surge and limited resources.
3. Determine detail and modifications required to improve the utility of the EMS Pandemic Influenza Dispatch Protocol.

EMS – Transport Diversion Protocol and Onsite Caller Triage and Assessment (Operations Analysis):

1. Evaluate EMS providers' ability to correctly interpret the protocol as they are related to case presentations.
2. Evaluate the utility of the protocols in actual use.
3. Determine other factors to be considered should the protocol need to be implemented.

Enhanced Surveillance (Operations Analysis):

1. Establish and activate an appropriate incident command organization.
2. Efficiently deploy appropriate equipment, staffing and information systems to screen, monitor, and identify persons with Influenza Like Illness (ILI) , to confirm thru lab-testing the pandemic flu virus type, to obtain mortality and morbidity data as a result of ILI and to assess treatment modalities.
3. Activate communication technologies to report to appropriate parties data from enhanced and epidemiological surveillance collection systems, vital statistics on morbidity/mortality from ILI and effectiveness of treatment.
4. Establish and implement mechanisms to assess surveillance, vital statistics and treatment data for appropriately responding to the event.
5. Test current procedures and protocols for implementing the transition back to collection and reporting systems between pandemic and pre-pandemic phases.

Governor's Well Mobile (Operations Analysis):

1. Test the alerting, notification and activation of the Governor's Well Mobiles in response to the need for additional medical care capabilities and capacity.
2. Evaluate the effectiveness of deploying the Governor's Well Mobiles for triage and treatment at locations in need of health care delivery and including populations at risk; i.e. migrant workers or rural populations.
3. Evaluate the ability of the Governor's Well Mobiles to provide healthcare.
4. Evaluate recovery of the Governor's Well Mobiles following mobilization and deployment as alternative care sites (ACS) during a pandemic response.

Internal Countermeasure Distribution (Operations Analysis):

1. Effectively set up command and operate under the Incident Command System (ICS).
2. Establish and maintain communications with local health department, local Emergency Operations Center (EOC) and other key partners.
3. Track inventory of dispensed medications.
4. Demonstrate the ability to establish and operate a healthcare facility and critical infra-structure internal countermeasure dispensing center Point-of-Dispensing (POD) that serves critical staff and their families. (Non-Public PODs).
5. Follow established Standard Operating Procedures (SOPs) for ordering additional SNS assets through the local Health Department. Command Center.
6. Return SNS assets back to the RSS.
7. Demonstrate the use of proper Personal Protective Equipment (PPE).

Interoperable Communications (Operations Analysis):

1. Assure selected operatives have adequate knowledge of the alternate communications systems available to them and how to access them.
2. Assure selected operatives can directly access the alternate communication systems or can engage special personnel to provide access to alternate communications systems.
3. Assure selected operatives have special access information necessary to use their systems.
4. Assure all key participants have and use GETS cards and WPS, where authorized.
5. Demonstrate the completion of test exercise documentation forms adaptation of Form 213.
6. Test and validate: (1) primary communications, (2) VoIP – DEMStel, (3) VoIP – DHMH, (4) GETS/WPS, (5) Amateur radio, (6) alternate radio services e.g. Satellite, HF - GuardNet (others TBD), (7) Health Alert Network (components to be used -), (8) Automated alerting systems e.g. EMTeam and OPR Alert Pagers -MIR-3, (9) Downlink satellite reception.
7. Complete a series of forwarded complex verbal communications through a minimum of 6 participants terminating back to origination point to validate message accuracy.
8. Implement a form of message authentication among a select set of participants.
9. Identify data and communication circuits to be listed under Telecommunication Services Priority and Restoration (TSP).

Joint Information Center – Public Information (Operations Analysis):

1. Share information with other designated primary Public Information Officers (PIO)-Joint Information Center (JIC) exercise participants.
2. Demonstrate ability to provide consistent messages to the media and public.
3. Successfully respond to injects and other exercise developments

DHMH Specific

1. Demonstrate consistent National Incident Management System (NIMS) compliant procedures in obtaining approval of all communications materials from Incident Commander at the DHMH OPR Command Center.
2. Disseminate approved messages in various formats (press release, public service announcement, fact sheet, etc.) to designated partners and media (via simulation).
3. Respond to telephone inquiries as needed and document activity related to each call.
4. Participate in DHMH Command Center conference calls and policy discussions.
5. May participate in mock media press conference if exercise events and circumstances make it necessary.

Allegany County Specific

1. Activation of local Joint Information Center (JIC) to coordinate and distribute information to the community.
   - Test notification and timely activation and staffing of the JIC
   - Coordination of agencies involved
   - Ability of PIOs to set-up and execute a press conference with leaders in the community.

Cecil County Specific

1. Activation of local Joint Information Center (JIC) to distribute information to the community.
   - Include local industry to test actual distribution of information and plans of "social distancing"
   - Coordination of information from all agencies involved
   - Coordination with school system to simulate continuity of operations related to social distancing and educational activities

Laboratory Surge (Operations Analysis):

1. Effectively establish activation of DHMH Laboratories Administration's Incident Command System.
2. Evaluate the Continuity of Operations Plan (COOP),
3. Testing of laboratory surge activities such as determination of the suspension of non-essential work and staffing needs and assignments.
4. Test current communications protocols.
5. Deactivate the Emergency Responses, Recovery and Return to Normal stages.

Mass Fatality Management (Operations Analysis):

1. Establish an effective Incident Command System
2. Establish long term Mass Fatality Management operations
3. Evaluate effective recovery operations

Medical Surge – Alternate Care Sites (Operations Analysis):

1. Establish an effective Incident Command structure
2. Establish and conduct effective Medical Surge / Alternate Care Site Operations.
3. Test the efficiency of recovery operations.

Strategic National Stockpile/Receipt Staging and Storage (Operations Analysis):

1. Evaluate direction of Medical Supplies Management and Tactical Distribution.
2. Effectively Activate Medical Supplies Management and Distribution.
3. Evaluate the ability to establish security operations at the RSS facility.
4. Evaluate the set up and control of Warehouse Operations and Distribution systems.
5. Test RSS facility ability to recover Medical Resources from public and private response partners, demobilize and return to normal ordering of medical supplies.

Vulnerable Populations (Operations Analysis):

1. Test the ability of hospitals to handle individual patients with special needs, such as individuals who are deaf, blind, developmentally disabled, mentally impaired, and/or who speak no English or speak English as a second language.
2. Evaluate the current JIC communications/notification systems for their ability to reach all populations, including individuals who are deaf or blind.
3. Test the ability of a hospital to handle an influx of patients with mental retardation and other disabilities from a residential facility, group home, state residential center, and/or adult service agency.
4. Test the ability of both a state facility and one or more local hospitals to coordinate resources during a medical surge event.

Continuity of Operations (Operations Analysis):

1. Evaluate the preparedness of Area Agencies on Aging to continue providing essential services, such as transportation and home care.
2. Evaluate preparedness of Area Agencies on Aging to handle the influx of constituent service calls related to pandemic flu.
3. Evaluate plans and test the ability of residential service providers, including group homes, alternate living units, state facilities, and nursing homes, to provide continuous staffing during a pandemic flu emergency.
4. Evaluate plans and test the ability of residential service providers, including group homes, alternate living units, state facilities, and nursing, to ensure an adequate supply of vital equipment and supplies, including food and medication.

Volunteer Activation (Operations Analysis):

1. Evaluate the activation of the Maryland Professional Volunteer Corp.
2. Evaluate Coordination with various volunteer agencies.
3. Test the operation of call centers and websites to gather information from unaffiliated spontaneous volunteers.
4. Evaluate the development and conduct of just-in-time training programs for volunteers to perform required tasks.
5. Evaluate the level of support provided to response operations using volunteer resources and volunteered technical capabilities.

Chapter 3: Exercise Events Synopsis

The exercise focused on the response to a pandemic influenza based on the priorities listed below:

- DHMH Command/Coordination Center
- Health and Medical Surge
  - Facilities, Personnel, Equipment and Supplies
- Interoperable and Redundant Communications
- Mass Fatality Response
- Vulnerable Populations
- Personal and Community Preparedness

The exercise was conducted over a three day period and represented a compressed timeline for the last 6 weeks of a 12 week pandemic influenza wave throughout Maryland. Pre-exercise situational reports (Appendix A) reflected presumed pan flu impact and response during the first 6 weeks of a pandemic. Centers for Disease Control and Prevention (CDC) modeling programs were used to determine the potential worst case impact of a 1918 type pandemic on the health care system and community. Additional situational reports were provided during the exercise time period to provide participants with information upon which to base their planning and response activities consistent with their pandemic influenza response plans. Copies of the situational reports used during the exercise are presented in Appendix A.

Scenario Background

March 2008: The international community and national health agencies have initiated the investigation of patients presenting with Influenza Like Illness (ILI) in overseas locations in the mid and far east. These influenza cases are suspected to be caused by a novel flu virus.

April 2008: World Health Organization (WHO) and the US have both elevated their pandemic influenza ratings. There have been clusters of out breaks in overseas countries predominately in Asia. However, suspected cases were identified in European countries as well as several US ports of entry. The virus has been identified as a novel Type A H7 N3 virus.
The WHO Suspected Case definition is as follows:

- Fever: equal to or greater than 100.4 F/ 38.2 C
- Severe productive cough occasionally bloody
- Exposure: Residence or travel to any region with a case of the novel strain.

May 19, 2008: Week 1 of the US pandemic Wave.
WHO has declared a pandemic and raised the Pan Flu Phase to WHO Phase 6 and US Stage 4. Epidemiological investigation has demonstrated a 35% attack rate and 30% mortality rate. The first cases have been confirmed in the United States. Maryland has only suspected cases.

Pre-exercise status as of the start of the exercise on 17 June 2008:

- US Stage has been elevated to US Stage 5: Spread through out the United States.

- CDC Recommends activation of Pan Flu Plans for the nation including those areas not affected.
- The CDC recommends enforcement of non-pharmaceutical containment measures in those communities least affected.
- Travel has been restricted.
- Multiple cases have been reported across the nation. There is a reported 50% absenteeism in the most affected areas of the country.
- The SNS and Vendor Managed Inventory (VMI) have been requested by several states.
  - Delivery has been hampered by the lack of personnel as well as diversion of equipment and supplies to other national priorities.
- National Guard units have been activated for law enforcement and support of critical infra-structure.
- WHO has officially declared an Influenza Pandemic. WHO Phase 6: sustained human to human transmission of the virus. The pandemic has been wide spread in the Asian and European continents. The US is at Stage 5 with variation of impact from large clusters to wide spread influenza illness in states.
- Several states have reported high incidences of plan flu. These include Hawaii, California, Texas, New York, Illinois, Massachusetts, Florida and Pennsylvania. Maryland is reporting mild to moderate cases statewide.

Major Events:

Real Date	Exercise Date	Activity	Who Phase/ US Stage
Functional Exercise Starts Day 1:			
Tuesday 0900 **17 June 2008**	**Maryland** **Week 5**	**Conference Call**	**Pandemic Period** **WHO Phase 6** **US Stage 5**
Tuesday 1100 **17 June 2008**	**Maryland** **Week 6**	**Sit Rep 5**	**Pandemic Period** **WHO Phase 6** **US Stage 5**
Tuesday 1200 **17 June 2008**	**Maryland** **Week 7**	**Conference Call**	**Pandemic Period** **WHO Phase 6** **US Stage 5**
Tuesday 1500 **17 June 2008**	**Maryland** **Week 8**	**Sit Rep 7**	**Pandemic Period** **WHO Phase 6** **US Stage 5**

Real Date	Exercise Date	Activity	Who Phase/ US Stage
Tuesday 1600 17 June 2008	Maryland Week 8	Conference Call	Pandemic Period WHO Phase 6 US Stage 5
Functional Exercise Day 2:			
Wednesday 0900 18 June 2008	Maryland Week 9	Conference Call	WHO Phase 6 US Stage 5
Wednesday 1100 18 June 2008	Maryland Week 10	Sit Rep 8	WHO Phase 6 US Stage 5
Wednesday 1200 18 June 2008	Maryland Week 11	Conference Call	Pandemic Period WHO Phase 6 US Stage 5
Wednesday 1500 18 June 2008	Maryland Week 12	Sit Rep 9	Pandemic Period WHO Phase 6 US Stage 55
Wednesday 1600 17 June 2008	Maryland Week 12	Conference Call	Pandemic Period WHO Phase 6 US Stage 5
Functional Exercise Day 3:			
Thursday 0900 19 June 2008	Recovery	Conference Call Sit Rep 10	Pandemic/ Recovery US Stage 6
Wednesday 1200 19 June 2008	Exercise End	Conference Call	Pandemic/ Recovery US Stage 6
Wednesday 1400 19 June 2008	Draft AAR Meeting		

Chapter 4: Analysis of Functional Areas and Operations

This chapter of the Maryland 2008 Statewide Pan Flu Exercise after-action report reviews performance of the sub-committee functions as defined by DHMH as well as exercise objectives and tasks created specifically for this exercise. This chapter takes strengths and areas for improvement from across the State of Maryland and summarizes each by the individual functional sub-committees.

Community Emergency Response Teams (CERT) (Back)

Key Strengths:

- Good EOC Communications with field based CERT members.
- Survey teams were able to effectively transmit data back to the EOC.
- The GIS application was impressive and allowed for accurate mapping of households as well as tracking of ill populations.
- Teams worked well with each other. There was a large sense of coordination and efficiency between the field teams and EOC staff and Incident Command.
- Everyone knew their role and the person they were to report to.
- Excellent turnout by CERT members.
- Good response to call out by Medical Reserve Corps.

Areas for Improvement:

- There was a communications breakdown between the POD and EOC. This caused some confusion as to the status of operations.
- Address information was not coordinated.
- ICS documentation needed to be expedited for completion and dissemination to necessary personnel.

Recommendations:

- Continue to utilize and perfect the application of GIS mapping and CERT integration during training and/or future exercises.
- Coordinate with other counties across the state to have them adopt similar practices and procedures.

Countermeasure Response Administration (CRA) (Back)

Key Strengths:

- Data entry of distributed medications entered into the CRA application for the CDC flowed well.
- Participants had information entered into the CRA application and other users were able to pull data and track progress within a short amount of time.

- The CRA "just-in-time" training that was performed was very successful and was key to all staffs' proficiency.

Areas for Improvement:

- The next step in the process is to roll this program out across the state and ensure an adequate level of training has been provided to registered users.

Recommendations:

- Continue to train hospital and health department staff on the CRA program; what it is, how it works, and how to use it.

Critical Infrastructure (Back)

Key Strengths:

- The CI Liaison within the DHMH Coordination Center was clearly needed and worked well for this exercise.
- Throughout the exercise there was good 2-way communications between critical infrastructure companies/emergency response personnel and the DHMH Coordination/Command Center.
- There was excellent communications to both Constellation Energy Incident Command Center and to Point Of Contact at the Constellation Energy delivery site.
- Once the anti viral medication request was made to the Maryland RSS site, there was very efficient delivery (escort, ETA, delivery/receipt, storage) of the requested medical supplies to Constellation Energy Occupational Medicine Staff.
- Having a primary exercise node at Constellation Energy was highly effective.

Areas for Improvement:

- Review roles/responsibilities with designated responders before drill or actual event.
- There was a need for equipment (PC, phone, and cell) at some response positions.
- There is a need to implement a tracking tool to obtain daily status of CI companies (absenteeism, issues/needs, state of critical services).
- It is important to properly staff ICS and response areas to handle multiple calls, emails and documentation as there are many CI companies across the state.
- Existing conferencing technology ("mute all" before Q&As and ability to handle increased participants.) needs improvement.

Recommendations:

- Provide more media coverage for next year's exercise.
- Build awareness for small/medium sized businesses in Maryland (collaborate with local EMA efforts) to enhance CI/KR/CM participation.
- Expand participation/membership to include CI Exercise Subcommittee members.
- Expand participation/membership to include missing CI/KR sectors.
- Enhance CI/KR/CM section of State pandemic Plan:

- Further detail roles/responsibilities/tasks for CI Liaison
- Unified Command as a model for integration of response activities
- Each CI/KR Sector (list of companies and emergency contacts; list of critical services provided)

DHMH Command/Coordination Center and COOP (Back)

Key Strengths:

- Staff coordination went very well.
- Staff utilized their subject matter expertise when needed and appropriate.
- Community and personal preparedness planning appear to be a top priority within the DHMH structure. This will ensure staff will be more able to provide support in time of real crisis.
- Issues of Continuity of Operations were exercised with DHMH Coordination Center staff by pulling out staff from the center to push the decisions that would need to be made with significantly decreased staffing.
- The DHMH-Critical Infrastructure Liaison role and two-way communication was tested and proved to be essential for situational awareness and mutual response support.
- Absenteeism issues and shift changes were effectively executed.
- Multiple interoperable and redundant communications systems were tested successfully.

Areas for Improvement:

- Just InTime training for call center personnel is needed prior to opening the call center.
- The call center needs to be located outside of the DHMH Command/Coordination Center to reduce noise and confusion.
- Additional training on ICS positions and form completion is needed.
- Safety: Need internal surveillance procedures for health screening during prolonged operations.
- Additional training on WebEOC should be conducted.
- Mechanisms for tracking inventory status would significantly streamline the process.

Recommendations:

- Move the Call Center location for future exercises and real world events.
- Perform additional training or drills on Incident Command alone and focus on Incident Action Plans and multiple operational periods.
- Conduct additional WebEOC training for all personnel that utilize the application and several backup staff for each position.

Educational Facilities (Back)

Key Strengths:

- Communications both internal and external to parents and public have been planned and tested frequently.
- Many of the school systems have internal planning and response teams that have initial training in National Incident Management System and ICS.
- Most school systems have a good working knowledge of Incident Management; how it relates to the schools and how schools should coordinate with outside emergency responders.
- All participating school districts have begun and/or completed initial emergency planning efforts. Some are further along than others, but all are working in the right direction.

Areas for Improvement:

- There are many systems that are lacking a Pan-Flu related plan or plan annex in their Emergency/Disaster Response Plans.
- There are many school systems that lack a COOP related plan or plan annex.
- There is a good knowledge base of ICS, however, schools need more practice with operational applications.

Recommendations:

- Continue ongoing training in preparedness initiatives and community involvement.
- Continue planning efforts; to include a Pan-Flu Plan and Continuity of Operations Planning.
- Incorporate ICS / NIMS into more non-emergency applications such as football games, events, prom, etc.
- Promote family preparedness.

EMS – Emergency Medical Dispatching (Back)

Key Strengths:

- The Pan Flu Emergency Medical Dispatch Modified Plan and Dynamic System Status Score were implemented by all participating 911 call centers.
- One center initiated routine dispatch but quickly realized that resources were becoming scare and converted to the modified dispatch protocol.
- Coding of the 911 caller scenarios for dispatch during a pandemic was consistent with national standards.
- Just in time training and briefing of dispatchers occurred and was helpful.
- Counties where law enforcement has Automatic External Defibrillators (AEDs) were able to cover more response requests when responders were dispatched to calls appropriate for their level of service.

- All counties utilized referral to nursing hotlines, case mangers or directed callers to alternative care sites.
- Operators were consistent in the application of determining response codes for EMS dispatch.
- This exercise highlighted the legal authority, scope of practice and liability issues related to the provision of EMS during a pandemic.

Areas for Improvement:

- Many smaller county 911 dispatch centers exhausted resources before the completion of the 50 scenarios.
- The exhaustion of key EMS resources (i.e. Advanced Life Support units) will need to be addressed despite the modified protocol.
- Mutual aid requests by rural counties adjacent to urban communities will deplete overall regional resources.
- Call center operators developed significant stress at the lack of their ability to meet the demands of the exercise.
- Operators also felt uncomfortable in dispatching fewer resources compared to normal operations.

Recommendations:

- Develop greater resources to train and implement the modified EMS dispatch protocols especially in rural communities.
- Make sure communities implement and adhere to the modified protocols to make the best use of limited resources.
- Incorporate this type of training in the standard training for 911 call centers especially to help dispatchers understand the rationale and to help them adjust to providing less than standard response resources.
- Make sure 911 call center phone systems can transfer calls to information resources and back to free up the 911 phone trunk to handle an increased call load.
- Develop better strategies for standardization, activation staffing and operations of alternative care sites.

EMS – Transport Diversion and On Scene Triage (Back)

Key Strengths:

- Both Basic Life Support (BLS) and Advanced Life Support (ALS) providers felt they have enough training and liability coverage to leave a patient that does not require emergency care during a pandemic on scene.
- Most BLS and ALS providers felt uncomfortable leaving a dying individual on scene especially when they do not have "No resuscitation" orders or advanced directives.
- BLS and ALS providers would be willing to withhold care and leave dying patients on scene during a pandemic.
- ALS accurately matched patient severity and needs with the expected destination category based upon the EMS On Scene Pandemic Flu Protocol.
- Both BLS and ALS providers were able to apply the On Scene Pandemic Flu Protocol to reduce the patient load on hospitals.

Areas for Improvement:

- Maryland Medical Protocol for EMS Providers states that EMS providers cannot withdraw or withhold EMS care unless the EMS/DNR patient stops breathing or losses their pulse. This may be in conflict with operations during a pandemic.
- BLS matched patients with the expected destination only 48% of the time.
- Both ALS and BLS providers tended to over triage between 18 and 19% of the patients left on scene, respectively.
- Triage to Alternative Care Sites was the second most inappropriate over triaged group.
- Develop better strategies for standardization, activation, staffing and operations of alternative care sites.
- Provide better communications to EMS field responders of the capabilities of alternative care sites during an incident/pan flu.

Recommendations:

- Modify the EMS medical protocols to allow the withdrawal and withholding of care during a pandemic.
- Developers of the ON Scene Pandemic Flu Protocol should develop guidance on the signs and symptoms related to mortal/terminal conditions warranting transport.
- The On-Scene Pandemic Flu Protocol should be revised for the provision of education and training focused on BLS providers.
- More in-depth education on the protocol for both BLS and ALS providers needs to be developed.

Enhanced Surveillance (Back)

Key Strengths:

- Pre-planning prior to exercise or real event strengthened response capabilities.
- Previous professional and working relationships between departments increased communication flow.
- Nurses in the operations area were beneficial.
- Throughout the exercise epidemiological/outbreak staff performed good documentation.
- Getting everybody to think about special needs was a good paradigm shift.
- Players made sure all communications were operational, 6 forms with 2 backups.
- During the exercise epidemiological/outbreak staff asked for a liaison with local hospitals.
- Training that had previously occurred with different ICS sections made a cohesive team.
- Surveillance and outbreak data that was received provided clear projection of current status of community.

Areas for Improvement:

- Need to communicate more frequently and sooner with EOC.
- Mental Health needs for the team should be a consideration.
- Have a better logistical plan to provide resources or some type of rationing plan.
- Forms for better documentation of finance section.
- Need to become proficient at transfers of command.

Recommendations:

- Plan for future mental health needs and communicate those needs through the Coordination Center.
- Have pre-printed ICS forms available for all Command and General ICS staff.

Governor's Wellmobile (Back)

Key Strengths:

- The activation and deployment of the Governor's Well Mobiles and a medical surge resource proceeded smoothly.
- The designation od an individual for data collection and entry ensured smooth processes through registration.
- Cooperation of all on-site partner agencies was exceptional.

Areas for Improvement:

- Safety issues need to be considered, for example, steps for entering and exiting the Wellmobile should be considered.

- Providers experienced difficulties providing medical care outside the Wellmobile when required for special needs individuals.

Recommendations:

- Plan for vulnerable and special needs populations.

Internal Countermeasure Distribution (Back)

Key Strengths:

- Medicines, medical supplies and antiviral medications were in stock and offered to patients and employees as needed.
- A web-based health survey was developed by a local health department that was implemented to assess the health of all health department and hospital employees and county residents.
- Employees who were suffering from the flu were able to access the web page from their home or office.
- Sick employees were able to input their signs, symptoms, comments and access health and self care information.
- Information on sick residents and employees was sent to the local EOC for tracking.
- A screening process to identify sick staff as they arrived for work was instituted.
- There is a plan to deliver preventative medical treatment to staff while they work.
- Countermeasure Point of Dispensing was well thought out and staffed.
- PODs were able to provide medication and information to the hospital staff in a timely manner.
- Hospital maintained stocks of medications were sufficient..
- Dispensing of medications within the hospital was prioritized by function/duties/activities within the hospital.

Areas for Improvement:

- There was no clear indication of the amount of medicine needed or available if supply runs low or short.
- There was confusion as to how to obtain more of this medicine (i.e., Tamiflu).
- There was some confusion among the county employees on how to properly use the system.
- There were some initial issues with filling out and submitting the web based document.
- There is not a consensus or procedure for determining the number of doses to give to staff for family members.
- There is some disagreement among staff as to the viability of the mobile delivery system.
- The other idea is to dispense them from a central point so the medications are secure and it is easier to control and record dispensing of medications.

- The guidelines for who get limited medicines are vague and left up to the Incident Commander to prioritize and determine based upon the incident.
- There is no process for monitoring adverse reactions especially for those doses given to staff for family members at home.
- Better instructions on completing the Tamiflu Distribution Form are needed.
- Personnel got confused and did not understand what information was required in each field.

Recommendations:

- Have enough medicine in stock for employees so that they stay healthy to treat and care for patients.
- Set up an agreement so that medicines and supplies can be obtained from other hospitals.
- Set up a policy for contacting and receiving inventory from the national stockpile site.
- Provide additional training for employees on a periodic basis to ensure they understand the Tamiflu Distribution form being used and how to access it.
- The web based reporting system requires some additional adjustments by county personnel to eliminate the technical "bugs" discovered.
- There are valid reasons both pro and con for mobile dispensing of the medicines to staff. It is recommended that a post exercise conference on this be conducted and an official procedure be established.
- Although it may be difficult to set a finite medicine list for each possible situation a base list of priorities for distribution of limited medications should be established and published. Certain functions will be critical no matter the incident and those should be listed as a base list and then incident dependant guidance can be added.

Interoperable Communications (Back)

Key Strengths:

- Ability to communicate with NetCom and multiple jurisdictions and locations 220 and 440 MHz amateur radio was effective.
- The coordination and communication between hospitals and HAM operators was good. ID's have been issued for the operators for some hospitals.
- Radio equipment was organized and installed on a cart with a battery backup system.
- Radio equipment was located in the same area as the antenna hookups.
- The hospital was able to transmit data and email by using Winlink/Airmail programs.
- Use of communication logs allowed response activities to be documented per ICS.
- Communication is a huge improvement over previous exercises.
- Utilization of runners and hand-written notes when electronic communications were lost was an effective back-up made on the fly.
- The 3N System (National Notification Network) was used to relay messages to all hospital staff.

- Messages were sent to cell phones, pagers, emails, phone phones to alert hospital staff of critical information.
- Staff must reply once message is received or the 3N system will continue to send messages until a reply is received.
- Web EOC was in place to relay information to hospital incident command center.
- All essential command staff responded promptly to conference call appointments.
- FRED (Facility Response Emergency Database) alerts all hospitals within Maryland of important information such as weather related emergencies, mass causalities, etc.
- Direct communication with and between Health Departments via landline, email, VoIP, amateur radio and satellite phones was available.
- There were extra cell phones available and they were preprogrammed with the necessary internal numbers.
- During triage of "paper" patients the Emergency Department kept hospital Incident Command Center appraised of progress and status.
- Once up and running the laptops connected with the wireless network. Good connectivity was maintained through out the day.
- Facility staff maintained good communications about tasks accomplished.

Areas for Improvement:

- Each laptop should have a paper or sticker with critical passwords on it and the program that uses each password.
- The Incident Command Center should have a person whose only function is to be a scribe. Any verbal messages and events should be recorded by the scribe.
- Dedicate additional phones for use in alternate Incident Command Post (ICP). Have them readily available along with the extra radios and dedicated cell phones.
- Use of the hospital's dispatch would greatly enhance the ability of the ICP to get out the necessary messages.
- Use of plain language

Recommendations:

- Recommend implementing a scribe to be present in the command post to ensure decisions and discussions are documented.
- Continue to train and exercise using plain language pre NIMS guidelines.

Joint Information Center – Public Information (Back)

Key Strengths:

- Pre developed press releases and fact sheet templates significantly reduced turn around time on information approval and release.
- Pre-existing professional relationship between PIOs and their familiarity with Maryland Emergency Management Agency (MEMA) Emergency Operations Center Approval process for written information releases was efficient and allowed a high number of releases to be distributed on Day #1.

- Information gathering and flow was significantly improved
- There was a plan of action for several issues that require more time than exercise play allowed.

Areas for Improvement:

- Information gathering was a real challenge.
- Setting priorities and identifying potential information gaps needs improvement.
- Public Information Officers need to reach out to other sections heads, county health departments or other responders for more information, confirmation of accuracy and or development of hot topics.
- Preparation for real world communications challenges (noise levels in room, incorrect or incomplete information, and busy signals)
- Staffing was a significant issue for PIOs.

Recommendations:

- Pursue cross training other DHMH personnel on PIO/JIC duties to provide assistance and depth of knowledge.
- Continue to build personal relationships with local health departments and media outlets.

Laboratory Surge (Back)

Key Strengths:

- The laboratory streamlined and effective response was possible by having a step by step plan.
- All required supplies had been inventoried.
- Critical supplies had been ordered to provide a 6 to 12 week inventory.
- A Courier had been set up in advance for transport of both routine and priority samples to the sister facility in Easton.
- The Easton facility is responsible for routing of samples to state and county labs.
- Staffing availability had been verified prior to start of activity.
- A staff matrix was developed to determine what lab functions could be performed based on continuing reduction in staff.
- Staff had developed a Lab Pan Flu Test Menu to define which lab testing could be supported based upon reduced staff levels and increased workload from flu specific analyses.
- Participants had good understanding of ICS and how to staff positions.
- Blast Fax and Blast Email is properly set up to distribute messages to appropriate people, facilities and agencies.
- The Laboratory has ICS Position packets ready to assist personnel functioning as responders. The packets contain a position description, organizational charts, contact lists, and necessary forms to be utilized during the incident.

- Laboratory management has a list of personnel that are "qualified" to function on Emergency Response Teams during an emergency. Such personnel must go through training to join a team.

Areas for Improvement:

- Making sure that labs get the proper notification alerts.
- Staff had limited knowledge of the Laboratory Response Network or their role within it.
- No formal method in place for transfer of sample custody from facility to courier.
- Implementing and updating Incident Action Plans through the course of an incident and when changing Incident Commanders needs improvement.
- Working with the DHMH Coordination/Command Center
- There were miscommunications between incoming and outgoing personnel during Transfer of Command between Incident Management shifts
- The Laboratory's public address system cannot be heard throughout the facility.

Recommendations:

- Provide additional training on the Laboratory Response Network and then practice procedures in a drill.
- Ensure IAP completion in all future trainings and drills to increase knowledge and practice.
- Train and test transfer of command in the next exercise.

Mass Fatality Management (Back)

Key Strengths:

- Mass fatality discussions had already been held before the 14:45 Mass Fatality conference call, allowing for pointed and applicable questions to be asked of the state experts.
- There is a very good base procedure for operation of the morgue. This includes checks and balances to verify ID and property custody. This process is expandable to mass casualty.
- Personal Protective Equipment (PPE) materials were available and procedures instituted to protect those working in the morgue and to maintain sanitation of the area.
- There is an established working relationship with the medical examiner as well as the local mortuaries. All are familiar with the hospital's procedures and follow them.

Areas for Improvement:

- There is no finite plan for coping with mass fatalities.
- There are some thoughts and ideas on the subject but no procedure to store or maintain a significant number of bodies.

Recommendations:

- Continue work being done through the Mass Fatality Management Work Group to formalize a statewide plan/template and develop local plans.

Medical Surge – Alternate Care Sites (Back)

Key Strengths:

- Incident Commander is very knowledgeable and confident of the Hospital Incident Command System.
- During the exercise, the IC was very quick to make decisions and instill confidence in the command staff.
- The transportation department was well organized and trained. They had the proper PPE and thoroughly understood their isolation route and steps necessary to transfer patients from the Alternative Care facility to the isolation ward.
- The hospital building staff was able to establish negative pressure wards within an hour of notification.
- Hosptail staff were able to identify areas that needed further adjustments for effective negative pressure isolation and contacted the manufacture to establish the necessary steps to made the recommended and identified adjustments.
- The Alternative Care Site was quickly staffed.
- Alternate Care Site staff were aware of their individual job duties and responseibilities and communicated well amongst each other.
- When radio communication failed between the ACS and ICP, staff quickly set up runners to pass information.
- Hosptail staff Identified additional space for overflow patients.
- Rapid assessment of needs was performed and lent to rapid decision making.
- Triage was conducted in a thorough and orderly manner.
- Patients were prioritized and sent to proper locations according to symptoms.
- Staff quickly enacted Maryland Department of Health and Mental Hygiene Secretary's orders for reduced standards of care and scope of practice

Areas for Improvement:

- The Alternative Care Site needs to consider patient flow. They had patients in the Delayed and Minor categories flowing through the immediate area. This could cause cross-contamination and psychological stress to the other patients.
- The Job Action Sheets for the command staff need to be adjusted to the hospital and the staff's actual mission.
- The Command Staff was uncomfortable with the Job Action Sheets (JAS) and stated that the sheets would not assist other staff filling the positions.
- Negative pressure is difficult to establish in a large area. There was a problem with staff opening doors and elevators. There needs to be a way to lock out those doors and elevators.

- Requests for portable ventilators to be delivered to the Emergency Department were delayed

Recommendations:

- When establishing an alternative care site, different triage categories should be separated in order to prevent cross contamination.
- Job Action Sheets should outline the necessary steps to accomplish the mission.
- Each member of the Command Staff needs to look at their JAS and make recommend the necessary changes.
- They need to ensure that the JAS is a tool that anyone can use to accomplish the mission.
- Establishing the ability to lock out doors and elevators on the rooms and wards that are set up for negative pressure will enhance the ability to maintain negative pressure.
- They also need to communicate to all of the hospital staff that negative pressure has been established and they need to follow the protocol for negative pressure.
- Equipment such as portable ventilators need to be more readily deployable.
- Critical resources required for an infectious disease outbreak need to be identified and increased re-order levels for those items made.
- Policies are needed to reinforce requirements to have staff work overtime in declared emergencies or disasters.
- Additional Memorandums Of Agreement (MOA) and Memorandums Of Understanding (MOU) with vendors regarding stockpiling, delivery schedules and receiving times for critical items should be developed.

Strategic National Stockpile/Receipt Staging and Storage (Back)

Key Strengths:

- Quality Control of pallets being distributed.
- Pharmacists were at loading points to find errors in packaging.
- Picking, sorting and loading personnel (Air National Guard) were well trained and performed assigned tasks well.
- Since all participants had trained and exercised together before, this activity flowed well.
- Use of cross dock facility worked well for receipt and distribution of SNS.
- Good communication between order receiving and order pulling points.
- Medications requested from the SNS arrived in a timely fashion and the transition of assets at delivery went well.
- Attempts to establish a POD for dispensing Tamiflu to employees and members of their immediate households resulted in an alteration of the process. From a centralized POD to a unit/department specific distribution.
- Security Check-in identified a driver/contractor with outstanding warrants.

Areas for Improvement:

- The truck being used to transport the first delivery broke down showing the need for backup units.
- Security check-in point created choke point causing backups into facility.
- Radio communications with trucks not available at all locations.
- Rapid Reach failed day before exercise.
- Staff parking was not planned and caused delays.
- Basic drug information covering such things as significant interactions and side effects should be included in the SNS to be distributed with each course of treatment.
- The Hospital did not have a location for the locked storage of bulk shipments from the SNS.

Recommendations:

- Plan for backup trucks in case of equipment failure.
- Move check-in point further down road and have an area for pull off of vehicles which may require more time.
- Revise OPS plan for Security check-in point.
- Increase Security check-in point staffing.
- Redundant communications was used (cell, email and in-car internet access)
- Utilize different system to contact personnel to be redundant to Rapid Reach.
- Designate parking area for staff away from potential loading and off loading areas.

Vulnerable Populations (Back)

Key Strengths:

- Epidemiological surveillance staff discussed special needs populations and how they may affect operations.
- Medical surge sites effectively handled patients with special needs.
- Dispensing operations discussed vulnerable population scenarios.

Areas for Improvement:

- Difficulties providing medical care outside of Governor's Well Mobile when required for special needs individuals.
- The Standard Operating Procedures (SOPs) for vulnerable populations should outline specifics about the different vulnerable populations. For example- what should they do with people's pets and what should they do with people's assistance devices.
- SOPs and Emergency Action Plans (EAPs) should outline specific steps in handling "vulnerable" populations.
- Staff needs to be trained on vulnerable population SOPs and EAPs.
- There is a need to ensure that documents at POD sites, hospitals and ACS can be provided in multiple languages and that the deaf and blind can be accommodated.

Recommendations:

- Recommend that planning groups engaged representative of vulnerable populations.
- Increase the involvement of vulnerable populations in future exercises by appointing a representative to each of the necessary planning sub-committees.

Volunteer Activation (Back)

Key Strengths:

- Players exuded a large display of teamwork throughout the exercise.
- HAM Radio capabilities were a strength.
- Clear concise directions given to staff improved efficiency.
- Professionalism of all staff was at its highest.
- Personnel were very flexible and had to adapt to a changing situation many times.
- There was a strong sense of community among responders which made the job being performed a much high quality
- Efficient, effective communications increased player situational awareness.
- There were defined roles and responsibility in the command center.

Areas for Improvement:

- Interview Forms needed area for phone #; availability; certification level; medical specialty.
- Bilingual Needs.
- Post event services (i.e. Critical Incident Stress Debriefing) for volunteers.
- Interview screening for security issues.
- Need to look at Special Needs groups and considerations.

Recommendations:

- Update and revise interview forms then exercise with it to flush out any additional changes.
- Plan for Critical Incident Stress Debriefing for all staff; paid and volunteer.
- Work with the Vulnerable Populations committee to ensure all facets and considerations are planned for.

Chapter 5: Conclusion

The Maryland 2008 Statewide Pan-Flu Exercise utilized tabletop, functional and full-scale exercise activities to test every facet of a response to Pandemic Influenza. Specific emergency response categories such as: incident command and management coordination; health and medical surge; interoperable and redundant communications; mass fatality response; vulnerable populations; and personal and community preparedness were exercised during this extensive exercise.

The scenario assumed a 1918-like Pandemic with a 35% attack rate. In addition, the exercise scenario started at Pandemic Influenza week 5 to test health and medical response at the pandemic peak through recovery. Thus, severely impacting societal integrity and function by overwhelming health care systems and crippling critical infra-structure. The impact of the pandemic is reflected in the numerous Situation Reports developed for the exercise.

Statewide, Emergency Support Function 8: Health and Medical public and private partners including federal, state and local agencies, healthcare providers and critical infra-structure reacted to overcome challenges presented by scenario.. Participants demonstrated a great deal of collaboration and integration of response activities.

Agencies across the state were able to maintain situational awareness through regular conference calls and statewide email alerts. Participants were able to play out injects and scenarios by tabletop discussion, functional play, and/or full-scale operations while keeping in step with the broader 12 week pandemic wave timeline.

The State of Maryland, led by the DHMH Office of Preparedness and Response, effectively managed the response to the influenza scenario while keeping health, safety and continuity of operations as key priorities throughout the event.

Each site-specific exercise revealed the high level of preparedness and pre-planning that has been accomplished across the state. Although there were noted areas for improvement, overall the exercise proved the strengths that exist within the State of Maryland's health and medical agencies, personal and community preparedness, critical infra-structure, interoperable communications, and emergency management agencies. This exercise further reinforces the benefits of coordinated planning, training and exercising.

Sustained multi-agency exercise participation, as demonstrated throughout the Maryland 2008 Statewide Pan-Flu Exercise, will continue to prepare the State of Maryland to effectively manage the unique and complex operational response priorities that accompany a public health emergency. Planners should use the results of this exercise to forecast needs and requirements in responding to and recovering from public health incidents that require an integrated and unified response among Federal, State and local agencies.

Appendix A: Exercise Situational Reports:

The following documents are copies of the situation reports (Sit Reps) produced during the exercise. The functional aspects of the exercise occurred over a three day period. The last 6 weeks of a twelve week pan flu wave was compressed into this three day period. The initial Situational Reports represent information and materials sent to all participants prior to the start of the exercise. These Sit Reps reflected the progression of a pandemic in Maryland from week 0 to week five of the pandemic influenza wave.

The exercise covered week's six to 12 of a pandemic allowing participants to exercise their surge activities as well as recovery from a pandemic.

The data used to develop the Sit Reps were based upon 2006 Census Population estimates for Maryland. CDC Pan Flu modeling programs were used to determine the impact on Maryland Residents, healthcare system and economic losses during a 12 week pandemic wave. Assumptions made for the modeling included: Pandemic Severity Index: 5 (equal to the 1918 Pandemic) with an attack rate of 35%. Several other assumptions are part of the modeling programs but will not be discussed here.

It should be noted that there is no Sit Rep 6.

Event Title: 2008 Influenza Pandemic

Event Start date: March 15, 2008
Report date and Time: March 15, 2008: 9 am
Report Number: #1
Report Created By: DHMH/ OP&R
Contact Information: OP&R
Phone: OP&R Office: 410.767.0823
Email:

SITUATIONAL SUMMARY

Situation Summary From Start:

1) March 2008: The international community and national health agencies have initiated the investigation of patients presenting with Influenza like Illness (ILI) in overseas locations in the mid and far east. These influenza cases are suspected to be caused by a novel flu virus.
   a)

Situation Update / Summary Since Last Report:

1) **International:**
   a) World Health Organization (WHO) is investigating local clusters of Influenza Like Illness (ILI) and suspected novel Influenza Virus in Near and Far East with limited human to human transmission.
2) **United States/World Community**
   a) Epidemiologists and laboratory personnel are being deployed to assist in the investigation of the suspected outbreak.
   b) Antiviral medications from the SNS and other national caches are being distributed to expected endemic locations to contain the spread of the suspected virus.
3) **Maryland:**
   a) DHMH is alerted to the developing world situation through its biological surveillance programs and is currently monitoring reports from the CDC Epi-X and Health Alert Network (HAN).

There are no reported suspicious cases of Influenza like Illness in Maryland or the United States.

SITUATIONAL ANALYSIS AND ASSESSMENT

Assessment and Planning:

Reports from Asia suggest the possibility of a novel influenza virus as noted in the open source intelligence reports below. The world community is currently investigating and the WHO Phase and US Stage remain at current levels.

1) ***WHO Phase 3: Pandemic Alert***: Human infections with no or limited human to human spread remains in effect.
2) ***US Stage 1:*** **Suspected overseas outbreak.**

The presence of LIL at this time of year is a concern since seasonal flu does not routinely occur during these months.
DHMH is currently monitoring the situation closely. In addition, it is reviewing the Emergency Support function 8: Health and Medical and Pan Flu Plan at **Maryland Pan Flu Plan: Pages 5-35**
http://bioterrorism.dhmh.state.md.us/flu.htm
DHMH - PanFlu Plan - Version 7.2

EXECUTIVE ACTION

Federal Declarations:

None:

Date/Time, Title, Summary

EXECUTIVE ACTION

State of Emergency:	None
Date/Time, Title, Summary	
Catastrophic Health Care Declaration:	None
Date/Time, Title, Summary	
Executive Orders:	None
Date/Time, Title, Summary	
Order:	
Order:	
Order:	
Order:	
DHMH Command /Coordination Center:	Non-operational; OP&R and EDCP staff will continue to monitor reports and assess the potential impact on Maryland.
DHMH Executive Command Center:	Non-operational
EOC Activation:	None
List all EOCs Activated by County and function i.e. LHD.	

HUMAN SERVICES

Total Casualties:	None
Shelter Operations:	None
Give summary of locations	
School System:	None

EMERGENCY SERVICES

Health and Medical:	None
Law Enforcement:	None
EMS:	None
Fire and Rescue:	None
Search and Rescue:	None

INFRASTRUCTURE

Public Health:	Normal Operations
Energy:	Normal Operations
Transportation:	Normal Operations
Banking and Finance:	Normal Operations
Utilities/Water/Sewer:	Normal Operations
IT/Telecommunications:	Normal Operations
Food/Agriculture:	Normal Operations
Postal/Shipping:	Normal Operations
Government:	Normal Operations
Other:	

INFRASTRUCTURE

LOGISTICS

Volunteer Support:	None
Military Support:	None
Resource Distribution:	None
Air Operations:	None
Auxiliary Power	None
Warehouse/Staging Activity:	None
Donations Management:	None

REGIONAL ACTIVITIES

Western Region:	None
Capital Region:	None
Southern Region:	None
Central Region:	None
Eastern Region:	None

WEATHER

Forecast: Not applicable

Incident Intelligence

Source, Date/Time and Summary

Report or Summary: **Bangladesh Reports 1st Human Case Of Possible Novel Flu Virus**

Open source Associated Press

March 15, 2008 - 9:18am

DHAKA, Bangladesh (AP) - Bangladesh's Health Ministry says the nation's first human case of suspected novel influenza case has been detected.
The Directorate General of Health Services statement says a child was infected by the virus in January. The parents transported the child from a remote region to Dhaka for treatment after local doctors failed to cure him.
The statement Thursday did not give the child's name, age, or other details, but said the child has remained critical.
The statement says the suspected novel virus is currently under investigation by the Centers for Disease Control and Prevention in Atlanta and the World health Organization.

Report or Summary: CAIRO (Reuters) - Two Egyptian women died suspected influenza Monday, bringing to four the number of fatalities from the suspected novel virus in the most populous Arab country in less than a week as Egypt emerged from a warm-weather lull.

All four deaths involved residents from the same village and were believed to have resulted from exposure to sick or ill family members.

Firdaus Mohamed Hadad of Menoufia province in the Nile Delta region north of

Incident Intelligence

Source, Date/Time and Summary

Cairo was taken to hospital on Saturday and died early on Monday, Egypt's

Health Ministry said in a statement.

"She suffered from a high fever and difficulty breathing and had a pulmonary infection after coming into contact with a family member suspected of being infected," the statement said. "She was placed on a respirator but died at dawn on Monday."

Later, John Jabbour, an Egypt-based World Health Organization official, told

Reuters a second woman had died in northern Egypt. The health ministry identified the woman as Hanem Ibrahim from Damietta, also in the Nile Delta.

The four Egyptian deaths over the past week broke a 5-month pause in human cases in Egypt. Previously, 19 Egyptians have died of the deadly H5N1 bird flu virus since it emerged in Egypt in early 2006. Mr. Jabour, state that the WHO is conducting an analysis of the suspected virus to determine if it is the H5N1 bird flu virus. It is possible that the deadly H5N1 virus may have merged or mutated resulting in a new virus.

On Sunday, a 25-year-old Egyptian woman died of influenza like illness in the Nile Delta city of Mansoura while another woman, Ola Younis, died on Wednesday in Beni Suef province south of Cairo.

Jabbour said fatality in the recent cases was likely due to a delay in diagnosis after patients and their family members refused to seek medical care.

"All of the new cases have exposure. ... The problem is the delay in reporting that they have been exposed," he said. Patients are likely to survive if they start treatment with Tamiflu early after symptoms occur. However, none of the deceased were given the medication.

Health experts fear the H5N1 virus could mutate into a form that spreads easily from one person to another, possibly triggering a pandemic that could kill millions.

Report or Summary:
Report or Summary:
Report or Summary:

Event Title: 2008 Influenza Pandemic

Event Start date: March 15, 2008
Report date and Time: April 15, 2008: 9 am
Report Number: #2
Report Created By: DHMH/ OP&R
Contact Information: OP&R
Phone: DHMH Call Center: 866.829.5240; Fax: 410.225.0378 (OP&R Office 410.767.0823)
Email:

SITUATIONAL SUMMARY

Situation Summary From Start:

1) March 2008: The international community and national health agencies have initiated the investigation of patients presenting with Influenza like Illness (ILI) in overseas locations in the mid and far east. These influenza cases are suspected to be caused by a novel flu virus.

Situation Update / Summary Since Last Report:

1) International:
- a) WHO has identified clusters of illness that have developed in overseas locations.
- b) The virus has been identified as a novel Type A H7 N3 virus.
- c) The *WHO Suspected Case definition* is as follows:
  - i) Fever: equal to or greater than 100.4 F/ 38.2 C;
  - ii) Severe productive cough occasionally bloody;
  - iii) Exposure: Residence or travel to any region with a case of the novel strain.
- d) ***WHO increases to WHO Phase 4-5:*** small to larger localized clusters with limited human to human transmission and poor adaptation to humans.
- e) Anti-viral medications are being given to suspected cases as well as exposed individuals in an attempt to contain the overseas outbreaks.
- f) International travel restrictions are being considered with screening of departing passengers from endemic regions.

2) United States:
- a) ***US Stage has been elevated to US Stage 2:*** Confirmed Outbreak overseas.
- b) Based upon preliminary overseas findings *CDC has issued a Pandemic Alert.*
- c) CDC Quarantine service has deployed staff to major international ports of entry for enhanced surveillance of entering passengers.
- d) Several suspected cases of Influenza have been identified at the following US ports of entry (airports): Los Angles, Chicago, Dallas and New York City.
- e) The CDC Lab is performing tests to confirm the presence of the novel virus.

3) **Maryland: Maryland Pan Flu Plan: Page 5-35**
http://bioterrorism.dhmh.state.md.us/flu.htm
DHMH - PanFlu Plan - Version 7.2
- a) DHMH has alerted and deployed a limited DHMH Command/Coordination Center.
  - i) DHMH has continued to monitor international developments and is conducting daily discussions in preparation for the pandemic.
  - ii) DHMH is assessing the healthcare system to determine potential gaps in the ability to deliver healthcare.
  - iii) DHMH is making recommendations for personal and community preparedness.
- b) The healthcare system, response partners and critical infra-structure have been notified and advised to review their pan flu plans in preparation for a pandemic.
- c) Public Service Messages are being given through several media outlets.

SITUATIONAL ANALYSIS AND ASSESSMENT

Assessment and Planning: ***WHO increases to WHO Phase 4-5***; ***US Stage has been elevated to US Stage 2:***

The likelihood of a pandemic is very high. The Federal government is taking steps to limit the spread of the virus into the Unites States. However, this is unlikely given the number of suspected cases currently

detained at US points of entry.

Surveillance data and reports from the WHO and CDC suggest that the ILI reported in many Asian countries is related to the novel Type A H7 N3 virus. Although, exact determination of the attack rate due to the new virus is difficult since many far east countries have experienced seasonal flu endemics in March and July.

WHO has determined a suspect case definition.

The PHS Quarantine Service is aggressively checking incoming flights from the far east. Suspected cases of individuals have been identified in the following cities: Los Angles, Chicago, Dallas and New York City. These individuals have advised to stay home and away from other family members. International travelers have been housed in quarantine.

DHMH Recommendations include:

Planning Response

1) Develop a pan flu-planning group.
   a) Staff from all levels and skills within the facility should participate and be heard.
2) Develop a Pan Flu plan for the facility which integrates with other facility response plans i.e. Disaster plan
   a) Identify gaps in planning and develop solutions to fill the gaps.
3) Share your plan with local providers and response agencies.
4) Integrate facility pan flu planning into regional planning efforts
   a) Participate in regional and statewide planning, training and exercise activities for pan flu.
   b) Health and Medical Regions
   c) Emergency Medical Services (EMS), Local Health Departments (LHD), Emergency Management Agency (EMA) and local health care providers.
   d) Develop credible and close liaisons with all health care providers to facilitate planning and response during a pandemic
5) Develop a response plan in the case of a Declaration of Public Health Emergency by the Maryland Department of Health & Mental Hygiene (DHMH).
   a) Identify the potential impact(s) on the facility and plan for it.
6) Formalize how the facility's Incident Command Structure/Emergency Operations Center (ICS/EOC) will integrate with local, regional and state wide incident command structures.
   a) Practice and exercise.
   b) Develop an inventory of response partners and contact information.
7) Develop plans and Memorandum of Understanding (MOUs) for assistance in planning and response activities:
   a) Integration of planning and response activities.
   b) Exchange of consumable resources
   c) Sharing and loaning of staff.
   d) Alternate work sites
   e) Alternate change in staffing
8) Clearly define the role, responsibility and actions of:
   a) The organization/facility
   b) Facility staff and providers, ancillary services staff
   c) Other regional response partners
9) Review and update facility disaster plans.
   a) Establish and review the trigger points for each step of the disaster plan in light of the expected impact of flu on facility operations.
   b) Cohorting employees in rooms or areas.

   c) Change in staffing ratios.
   d) Change in work shifts.
   e) Change in hours of operation.
10) Plan for the discontinuation of non-essential activities.
11) Identify essential functions of the facility to be conducted during limited operations associated with pandemic flu as well as resources needed to maintain those essential operations:
   a) Staff
   b) Disposable/consumable supplies.
   c) Flu treatment/areas to cohort and isolate employees.
12) Develop plans for the reassignment of duties by all staff members
   a) Conduct discussions with professional organizations and unions regarding tasks outside standard job descriptions for staff during a pandemic.
   b) Develop training programs for staff assigned new responsibilities and conducting new duties
13) Develop, review and update Continuity of Operations Plans.
   a) All private industry and businesses should have or develop Continuity of Operations Plans.
   b) Those with COOP should review and update them (recommended yearly).
14) Develop plans and recommendations for "Fever" Stations to identify sick individuals and preventing them from entering:
   a) The facility
   b) Areas of the facility where there are no flu patients.
15) Develop plans for Fever Clinics for evaluation and treatment of sick individuals before entering the facility.
   a) The patients identified (either by self identification or through the Fever station) should be segregated from other staff or individuals.
   b) The Fever Clinic should be conducted away from high traffic areas or where other non-flu critical other staff or individuals are housed.
16) Develop plans to restrict visitation.
17) Obtain/develop signage for all entry points:
   a) Self-referral and identification.
   b) Infection control procedures.
   c) Cough etiquette.
18) Employee health/Occupational medicine should develop standing orders for evaluation, treatment and isolation of flu patients to facilitate and expedite treatment of flu patients.
19) Plans to develop and conduct provider awareness and familiarization activities:
   a) Flu review
   b) Infection control procedures
   c) Recommendations for vaccination.
20) Develop plans and identify staff to conduct "just in time" training for staff:
   a) Altered standards of care.
   b) Isolation
   c) Home quarantine
21) Identify and integrate ancillary support services such as social, mental health and faith based services, which might be required to augment pan flu response.
22) Review and update facility security plans.
23) Facilities should develop data management plans and programs to monitor and tract:
   a) The utilization of resources
   b) Staff activities related to flu response
   c) Resources commandeered by the state for the public good
   d) Critical resource inventory and tracking
24) Develop plans for the transition to normal operations following a response to pan flu.

Financial

1) Estimate the expected financial impact of pandemic flu on facility financial status and health.
2) Plan for severe financial impact related to loss of income generating activities, loss of staff, increased need for resources, etc.

Workforce Sustainment:

1) Encourage and facilitate the development of "emergency" response plans by all staff:
   a) Care of all dependents

   b) Plans for extended duty hours
   c) Home health care for those family members who may become sick
2) Develop and coordinate an active volunteer registration and training program.
   a) All types of skill sets.
3) Plan for "Fever" Stations to identify sick staff and visitors entering the facility.
4) Conduct staff awareness and familiarization activities:
   a) Hygiene/infection control
   b) Flu review
   c) Institutional response plans
   d) Vaccination recommendations
   e) Continuity of Operations Plans (COOP)
5) Develop and review employee vaccination and countermeasure distribution program
   a) Identification and tracking of vaccinated employees
   b) Plans for repeat/two vaccinations
   c) Establish vaccination priorities
      i) Essential staff
   d) Identify employees at high risk
      i) Of exposure
      ii) Of medical complications
   e) Reporting and monitoring of adverse side effects and reactions
6) Identify those who could work from home.
7) Develop liberal sick leave policies
8) Develop plans for child and eldercare for staff that depend on these support services.
   a) Contract with a local or nearby hotel to provide these services if needed.
9) Develop plans to have sick family members cared for within the facility.
10) Develop plans to offer staff respite areas for nourishment and rest.
11) Develop ancillary support services for staff:
   a) Mental health teams to identity over-worked stressed staff members before they become incapacitated and unable to function or conduct their duties.
12) Encourage all staff to openly express their concerns and fears without retribution of criticism.
   a) Administration should be attentive, open and listen without judgment or threat to their employment.
13) Identify all staff essential to pan flu response and assess reasons that they would not be available during a pandemic.
   a) Address these concerns.

Legal:

1) Identify crucial laws, regulations and or statues which may interfere with effective response.
2) Determine the legal issues and facility's legal liability and plans to conduct the following activities related to pan flu response
   a) Mandatory vaccination of essential personnel or others to protect public health.
   b) Distribution and use of unlicensed vaccine.
   c) Vaccination by unlicensed personnel or by those where vaccination is outside the scope of their usual practice.
   d) Workman's compensations issues.
   e) Health care delivery at alternative care sites.
   f) Isolation and quarantine.
   g) Closure of the facility to new admissions or visitors.
   h) Financial reimbursement of private health care partners.
3) Review all MOUs and compacts, supporting the facility's operations during emergencies.

Vaccination (if available):

1) Develop and review employee vaccination program:
   a) Identification and tracking of vaccinated employees
   b) Plans for repeat/two vaccinations
   c) Establish vaccination priorities
      i) Essential staff
   d) Identify employees at high risk
      i) Of exposure

   ii) Of medical complications
   e) Reporting and monitoring of adverse side effects and reactions
2) Develop plans for vaccination of all staff and family members
3) Develop plans and criteria for pneumococcal vaccination for all high-risk staff.

Resource Planning:

1) Monitor /inventory resources needed to conduct the essential activities of the facility during a public health emergency and pandemic flu.
2) Develop plans for the prioritized distribution of limited resources within the facility.
3) Develop plans to ensure supplies i.e. of vaccine and antiviral medications:
   a) Vaccine orders from multiple sources
   b) MOUs with other providers to share vaccine if in short supply or excess at different facilities.
   c) Increase Par levels
   d) Develop contracts/MOUs with suppliers
4) Develop plans and guidelines to develop facility stockpiles of required supplies and consumables.
   a) Personal Protective Equipment (PPE)
5) Understand how requests for emergency supplies will be handled in your region.
6) Review and familiarize the appropriate staff in the local plan to distribute supplies and equipment from the state.
   a) Prepare plans for receiving supplies from the local distribution center.
7) Ensure that public messages are monitored is monitored and that the facility responds to communications. Keep up to date inventory in case of information requests:
8) Understand how to report and make requests to LHD's and EMA's.

Surveillance Activities:

1) Institute flu/disease surveillance activities within the facility:
   a) Monitoring of public health announcements
   b) Development of flu symptoms in staff.
   c) The number of employees developing the flu.
   d) Monitoring of employees and visitors entering the facility.
2) Assess and report weekly flu activity within the facility.
   a) Facility management

Employee Health / Occupational Medicine:

1) Identify ways to augment lab staff to handle increase in sick staff

   a) Cross training
   b) Establish working relationships with other clinical partners who could help handle sample surge

Communications:

1) Develop a communications plan to focus on information surge and the distribution of health related information to:
   a) All staff and their family members.
   b) Non-English speakers.
2) Clearly define the lead spokes person for the facility.
   a) Establish a process for developing consistent messages with those of public health.
3) Develop hot lines and other pathways for dissemination of flu health care information for staff.
   a) How the flu pandemic will affect facility operations.
      i) Fever stations.
      ii) Limited visitation.
      iii) Limited operations.
   b) Provision of homecare.
   c) Personal hygiene.
   d) Infection control procedures.
   e) Flu background.

f) When to seek care and help.

EXECUTIVE ACTION

Federal Declarations:

Date/Time, Title, Summary

April 25, 2008: *US Stage has been elevated to US Stage 2:* Confirmed Outbreak overseas. This parallels the *WHO elevation to WHO Phase 4-5:* small to larger localized clusters with limited human to human transmission and poor adaptation to humans.

The CDC has issued a Pandemic Alert.

State of Emergency:

None

Date/Time, Title, Summary

Catastrophic Health Care Declaration:

None

Date/Time, Title, Summary

Executive Orders:

None

Date/Time, Title, Summary

Order:

Order:

Order:

Order:

DHMH Command /Coordination Center:

1. DHMH has alerted and deployed a limited DHMH Command/Coordination Center.
   a. DHMH has continued to monitor international developments and is conducting daily discussions in preparation for the pandemic.
   b. DHMH is assessing the healthcare system to determine potential gaps in the ability to deliver healthcare.
   c. DHMH is making recommendations for personal and community preparedness.
2. The healthcare system, response partners and critical infra-structure have been notified and advised to review their pan flu plans in preparation for a pandemic.
3. Public Service Messages are being crafted and given through several media outlets

DHMH Executive Command Center:

Non-operational

EOC Activation:

None

List all EOCs Activated by County and function i.e. LHD.

HUMAN SERVICES

Total Casualties:

None reported in the United States.

Shelter Operations:

None

Give summary of locations

School System:

None

EMERGENCY SERVICES

Health and Medical:

Health care systems and critical infra-structure have been advised to review their Pan Flu and Medical Surge plans and to be prepared to activate them.

Law Enforcement:	None
EMS:	Public and private EMS systems have been advised to review their Medical Surge and Pan Flu plans and to be prepared to activate them.
Fire and Rescue:	None
Search and Rescue:	None

INFRASTRUCTURE

Public Health:	Normal Operations
Energy:	Normal Operations
Transportation:	Normal Operations
Banking and Finance:	Normal Operations
Utilities/Water/Sewer:	Normal Operations
IT/Telecommunications:	Normal Operations
Food/Agriculture:	Normal Operations
Postal/Shipping:	Normal Operations
Government:	Normal Operations
Other:	

LOGISTICS

Volunteer Support:	None
Military Support:	None
Resource Distribution:	None
Air Operations:	None
Auxiliary Power	None
Warehouse/Staging Activity:	None
Donations Management:	None

REGIONAL ACTIVITIES

Western Region:	None
Capital Region:	None
Southern Region:	None
Central Region:	None
Eastern Region:	None

WEATHER

Forecast:	Not applicable

Incident Intelligence

	Source, Date/Time and Summary
Report or Summary:	***Alert: Influenza Update - Hong Kong Thu April 26 13, 2008 8:04 am (PDT)***
	Subject: Alert: Influenza Update 2 - Hong Kong
	Severity: Informational Alert
Open source	*Health: UPDATE 2:* Hong Kong officials close all primary schools and kindergartens April 27th following the deaths of three children. Flu vaccine recommended.
	This alert affects Hong Kong SAR.
	This alert began 26 April 2008 01:06 GMT and is scheduled to expire 27 Apr 2008 23:59 GMT.
	Current Situation
	On April 25, Hong Kong authorities closed all primary schools and kindergartens following the deaths of three children.

Incident Intelligence

Source, Date/Time and Summary

Media reports indicate that five classmates of one of the deceased - a seven-year-old boy - are also hospitalized.
The recent spate of serious childhood illnesses unearthed memories of SARS and raised the possibility that respiratory illnesses circulating in the city may be more serious than the usual seasonal influenza. Scientists are investigating the deaths and recent outbreaks, but Hong Kong health department data - updated daily - gives no indication that respiratory illnesses are more severe than expected.
Hospital admission rates associated with influenza like illness are above expected values for this time of year. In addition, the number of persons seeking aid at emergency rooms is high. On April 23, more people sought aid in Hong Kong emergency rooms than on any day in the previous two years. Some of the large volume was probably due to anxiety and rumors surrounding the reports of the recent deaths of children as well as reports of the start of an influenza pandemic.
Influenza A is causing the majority of influenza illnesses in Hong Kong , although increasing numbers of infections are due to the other two seasonal influenza viruses - influenza A (H1N1) and influenza A (H3N2). In general, influenza A infections hit all age groups.
Background
In recent years, Hong Kong has experienced two peaks of influenza illness each year - one in March and another in July.
Advice
Monitor the situation closely. Travelers of all ages should consider the influenza vaccine. Older travelers should also consider the influenza pneumococcal pneumonia vaccine.
An inhalable (live-attenuated influenza) vaccine is available as an alternative to inject able vaccine for use in healthy persons age 5 to 49. Prescription anti-influenza medications are also available and can shorten the duration of illness and prevent complications if given within 48 hours of the onset of symptoms.
Resources
Daily Hong Kong health reports: http://www.chp. gov.hk/epidemiol ogy.asp?lang= en <http://www.chp. gov.hk/epidemiol ogy.asp?lang= en&id=448> &id=448

Related Advice: Information <http://wcdirect1. ijet.com/ direct/DisplayIo Content.public? ioId=16525> on influenza.

Report or Summary:

Hawaiian Officials Order Screening of Air passengers to Identify Pan Flu
April 15, 2008
Officials have launched an airport screening program, planned limited quarantines and amassed a supply of protective gear for doctors and nurses. The state's identity as a tourist mecca has given Hawaii a heightened sense of the dangers of a global pandemic. The islands' distance from other population centers, meanwhile, has instilled in officials the need for self-reliance and preparation.
"We are very concerned in Hawaii about the fact we are the western doorway to the United States," said Dr. Chiyome Fukino, director of the state Department of Health. "We see a large number of visitors ... and a good proportion of them are from the Far East, where we know a good number of emerging diseases are originating."
Today, the threat to Hawaii — and the world — stems from the identification of a possibility particularly deadly and fast-moving form of influenza currently in Asia. The strain has already killed more than 100 people from Vietnam to Turkey since march 2008.
Hawaii is particularly exposed to travelers carrying disease. The state of 1.3 million residents hosts an average of 171,000 travelers at any given time. About 20,000 people fly in each day.
Hawaii's airport plan calls for a nurse to take a swab from a potentially infected passenger on any plane, at the gate, or inside the airport. If tests show the traveler has a pandemic virus, authorities are prepared to quarantine the entire jet. Officials are also ready to cordon off a gate or other section of the airport to isolate people exposed to the passenger.
Still, officials know they won't be able to fully block the virus even with this approach because some people with the disease won't immediately show symptoms and won't be singled out for testing.
Instead, the state expects the screening to alert officials to the presence of the illness so they can contain it as much as possible, said Dr. Sarah Park, deputy chief of the Health Department's disease outbreak and control division.
"You can't guarantee a 100% barrier. You need to think more in terms of how do we detect it and once it's detected, how do we control it," Park said.
During an outbreak, Hawaii expects to test 6,000 samples per day from people who have or may have contracted the virus. That's enough for more than a third of Hawaii's population over eight weeks — roughly the length of time experts estimate each outbreak will last before petering out.
Dr. Gregory Poland, director of the Mayo Vaccine Research Group at the Mayo Clinic in Rochester, Minn., said Hawaii authorities understand the danger posed by the disease.
If the next pandemic proves to be as virulent and deadly as the 1918 Spanish flu, the federal government estimates 90 million people will contract the disease and 1.9 million people will die from it nationwide. Even if Hawaii is not the first state to suffer heavy losses, experts say it's vital that the islands be prepared.
Robert Kim-Farley, a professor at the University of California at Los Angeles' School of Public Health, said Hawaii is right to get an early start because all 50 states will be too busy dealing with their own outbreaks to help anyone else if the disease strikes.

Incident Intelligence

Source, Date/Time and Summary

Report or Summary: **Triggers for Active Pandemic Influenza Border Screening (DRAFT)**

	USG Stage 3 (WHO Phase 5)	USG Stage 4 (WHO Phase 5)	USG Stage 5 (WHO Phase 6)
	Widespread Outbreaks Overseas	**Disease in North America**	**Widespread Disease Throughout U.S.**
Air	**Screen at airports collocated with a CDC Quarantine Station**	**Risk Based Screening**	**Stand Down Entry Screening**
Sea	**Risk Based Screening**	**Risk Based Screening**	**Stand Down Entry Screening**
Land	**No actions**	**Risk Based Screening if disease in Canada or Mexico and not in the U.S.**	**Stand Down Entry Screening**

Report or Summary:

Report or Summary:

Event Title: 2008 Influenza Pandemic

Event Start date: March 15, 2008
Report date and Time: May 19, 2008: 10 pm
Report Number: #3
Report Created By: DHMH/ OP&R
Contact Information: OP&R
Phone: **DHMH Call Center: 866.829.5240; Fax: 410.225.0378** (OP&R Office 410.767.0823)
Email: PREPARED@dhmh.state.md.us

SITUATIONAL SUMMARY

Situation Summary From Start:

1) *March 2008:* The international community and national health agencies have initiated the investigation of patients presenting with Influenza like Illness (ILI) in overseas locations in the mid and far east. These influenza cases are suspected to be caused by a novel flu virus.
2) *April 2008:* WHO and the US have both elevated their pandemic influenza ratings. There have been clusters of out breaks in overseas countries predominately in Asia. However, suspected cases were identified in European countries as well as several US ports of entry. The virus has been identified as a novel Type A H7 N3 virus.
    a) The *WHO Suspected Case definition* is as follows:
        i) Fever: equal to or greater than 100.4 F/ 38.2 C;
        ii) Severe productive cough occasionally bloody;
        iii) Exposure: Residence or travel to any region with a case of the novel strain.
3) **Declaration of Week 1 Of US Pandemic**

Situation Update / Summary Since Last Report:

1) **International:**
    a) WHO has identified widespread illness in multiple overseas locations.
    b) *Preliminary Epidemiological Investigational findings include:*
        i) Attack rate is 35%;
        ii) At this time all age groups appear to be affected;
        iii) Mortality rate is 30%;
    c) *WHO has officially declared an Influenza Pandemic. WHO Phase 6: sustained human to human transmission of the virus.*
    d) International travel restrictions are being enforced.
2) **United States:**
    a) **Declaration of Week 1 Of US Pandemic**
    b) US Stage is currently at US Stage 3: Widespread outbreaks in multiple overseas locations.
    c) The first confirmed cases of Pandemic Influenza have been identified in the United States.
        i) California, Illinois, New York, Texas, New Jersey, Washington, DC.
    d) *US Stage 3 has been elevated to US Stage 4*: First human cases in North America and /or the United States.
    e) Based upon overseas findings *CDC has issued a Pandemic Standby to response organizations.*
3) **Maryland: Maryland Pan Flu Plan: Pages 35-79**
http://bioterrorism.dhmh.state.md.us/flu.htm
DHMH - PanFlu Plan - Version 7.2
    a) DHMH has activated the full DHMH Command/Coordination Center.
    b) DHMH Secretary has issued an order for enhanced Surveillance by healthcare providers
    c) DHMH Recommends that organizations activate their Pan Flu Plans and has made recommendations as noted below.
    d) Healthcare systems and facilities are advised to activate their Pan Flu, Medical Surge and Mass Fatality Plans. They responded accordingly.

SITUATIONAL ANALYSIS AND ASSESSMENT

SITUATIONAL ANALYSIS AND ASSESSMENT

Assessment and Planning: ***US Pandemic Week: 1***

WHO has officially declared an Influenza Pandemic. WHO Phase 6: sustained human to human transmission of the virus. The pandemic has been wide spread in the asian and European continents. The US is at Stage 4 with the first confirmed cases of Pandemic Influenza have been identified in the United States (California, Illinois, New York, Texas, New Jersey, Washington, DC).

Epidemiological analysis supports a Pandemic Severity Index rating of 5 consistent with a 1918 type pandemic. There both a high attack and mortality rates. It appears that all age groups are susceptible.

Although there have been no confirmed cases in Maryland, DHMH is recommending the activation of Pandemic Flu plans for critical infra-structure as well as the healthcare system.

DHMH makes the following recommendations:

Response:

1) Conduct all activities as noted in the Pandemic Alert Phase.
2) Conduct planning activities as needed for problems and issues, which develop as the incident unfolds.
3) Facilities should conduct final review, modification and enhancement of their pan flu response plans.
    a) Identify any gaps in the response plans and develop solutions to fill the gaps.
    b) Focus on the essential operational functions of the facility.
4) Standup and activate the facility ICS and EOC operations to the degree required by the incident.
    a) Communications between and interaction of the various ICS and EOC structures within the Critical Infra-structure should be tested and clarified at the local, regional and state levels.
    b) Command and control mechanisms should be tested
    c) Reiteration of the roles, responsibilities and goals of each component of the system should be restated.
    d) Conduct planning activities as needed for problems and issues, which develop as the incident unfolds or through review of all current and expected activities.
5) Clarify and test the integration and coordination of all response activities and plans at all levels of response.
6) Develop and conduct educational activities on topics needed for all staff and responders.
7) Control entry of symptomatic staff/visitors/workers with flu into facility:
    a) Early identification at entry points.
    b) Fever Stations at entry points
    c) Self referral information at entry points
    d) Proper isolation of symptomatic individuals
    e) Liberal sick leave policies for symptomatic staff members
    f) Refer identified sick individuals to Fever Clinics outside the facility for evaluation and treatment.
8) Deploy extensive signage at facility entry points for infection control and cough etiquette.
    a) Should also include hand gel.
    b) Enable self referral to Fever Clinics.
9) Review recommendations and guidelines for changes in the standard of care and be prepared to institute changes as needed.
10) Review and institute changes in the scope of work for all employees to maintain essential activities of the facility.
    a) Curtail all non-essential facility operations or activities.
    b) Re-assign staff to conduct duties in support of the essential mission.
11) Response plans should be initiated early with a low threshold as dictated by the situation:
    a) Emergency response plans for Flu
    b) COOP
12) Complete vaccination of all staff.
    a) Non-vaccinated staff and providers should be assigned to work areas with no or limited potential for exposure to flu.
    b) Assign medically high risk workers to areas of low flu exposure risk
13) Initiate plans to segregate symptomatic flu workers:
    a) From non-symptomatic patients or non-vaccinated staff
    b) Individuals with high risk for medical complications.
    c) Initiate, enforce and maximize cohorting plans for flu and non-flu workers.
        i) Rooms
        ii) Floors
14) Activate emergency operations plans for essential staff needed for the facility response.
15) Be prepared to initiate and activate COOP plans for facility essential functions.
16) Trigger data management plans and programs to monitor:
    a) Employee time and activities related to pan flu response.

SITUATIONAL ANALYSIS AND ASSESSMENT

Workforce Sustainment:

1) Deploy Fever Stations at Facility entry points to identify sick employees before they enter the facility.
   a) Refer to external Fever Clinics unless seriously ill.
2) Aggressive staff awareness and familiarization activities:
   a) Hygiene/infection control
   b) Flu review
   c) Institutional response plans
   d) Vaccination recommendations
   e) COOP
3) Encourage and enforce infection control and clean hygiene practices.
4) Vaccination of all employees
   a) Ensure repeat vaccinations if required.
   b) Track all adverse reactions and side effects.
5) Institute liberal sick leave policies to allow sick staff to stay home.
6) Institute liberal work at home policies.
7) Make recommendations that staff avoid mass gatherings within the facility.
8) Employee assignments:
   a) Assign only vaccinated staff or those recovering from flu to those areas where there is an increase of probable exposure.
   b) Assign all non-vaccinated or high risk employees to work in areas with low exposure potential.
9) Open the employee respite areas and enforce breaks and lunch periods away from their duty stations.
10) Initiate employee support activities: especially those required by essential staff:
   a) Child and elder care sites.
   b) Admission of sick family members.

Logistics and Resources:

1) Continue all activities as noted above
2) Update resource inventories and availability.
3) Identify resources in short supply and start procedures to increase inventory levels of essential resources.
4) Initiate mechanism to transfer consumable resources between providers based upon availability.
5) Pre-activate ancillary support services as noted above.
6) Continue to identify and assess suppliers of resources
   a) Equipment
   b) Supplies/consumables
   c) Staff/volunteers
7) Prepare for receipt of supplies distributed within the region.
8) Facilitate resource sharing and exchange where needed.

Legal:

1) Conduct activities as noted above
2) Monitor the legal environmental, identify potential legal problems and offer solutions as needed.

Vaccination (if available):

1) Initiate and complete facility vaccination programs for all employees, volunteers, and their families.
2) Vaccination of all high risk and essential personnel should be completed..
   a) Acute and chronic care patients
   b) Individuals at risk of medical complications
   c) Individuals required for essential activities and functions
3) Compile data on vaccination activities
   a) Compile a database and track all vaccinated individuals with adverse reactions and side effects

Surveillance Activities:

1) Continue surveillance activities as noted above.
2) Tract and report on flu activity within the facility and local health departments.

Employee Health/Occupational Medicine:

1) Determine whether to trigger a full scale response.

SITUATIONAL ANALYSIS AND ASSESSMENT

Communications:

1) Continue activities as noted above.
2) Continue with aggressive Information programs as initiated above for staff

EXECUTIVE ACTION

Federal Declarations:

Date/Time, Title, Summary

April 25, 2008: *US Stage has been elevated to US Stage 2:* Confirmed Outbreak overseas. This parallels the *WHO elevation to WHO Phase 4-5:* small to larger localized clusters with limited human to human transmission and poor adaptation to humans. The CDC has issued a Pandemic Alert.

May 19, 2008: The US stage has been at US Stage 3: Widespread outbreaks in multiple overseas locations. However, given the recent epidemiological findings it has been elevated a second time. *The current US Stage is US Stage 4: First human cases in North America and /or the United States.*

State of Emergency:

Date/Time, Title, Summary

None

Catastrophic Health Care Declaration:

Date/Time, Title, Summary

None

Executive Orders:

Date/Time, Title, Summary

None

Order:

Order:

Order:

Order:

DHMH Command /Coordination Center:

4. DHMH has activated it's command/coordination center and is staffing it 24/7
    a. DHMH has continued to monitor international developments and is conducting daily discussions in preparation for the pandemic.
    b. DHMH is assessing the healthcare system to determine potential gaps in the ability to deliver healthcare.
    c. DHMH is making recommendations for personal and community preparedness.
5. The healthcare system, response partners and critical infra-structure have been notified and advised to review their pan flu plans in preparation for a pandemic.
6. Public Service Messages regarding the use of clean hygiene, cough etiquette and voluntary quarantine have been running in all media.

DHMH Executive Command Center:

Non-operational

EOC Activation:

List all EOCs Activated by County and function i.e. LHD.

MEMA SEOC: has activated to Level 1.

HUMAN SERVICES

Total Casualties:

None reported in the United States.

HUMAN SERVICES

Shelter Operations:

None

Give summary of locations

School System: None

EMERGENCY SERVICES

Health and Medical: Health care systems and critical infra-structure have been advised to activate their Pan Flu and Medical Surge plans and to be prepared to activate them.

Law Enforcement: None

EMS: Public and private EMS systems have been advised to activate their Medical Surge and Pan Flu plans.

Fire and Rescue: None

Search and Rescue: None

INFRASTRUCTURE

Public Health: Normal Operations

Energy: Normal Operations

Constellation energy has institutes liberal leave and work at home policies. Only essential staff are reporting for work at this time.

Transportation: Normal Operations

Banking and Finance: Normal Operations

Utilities/Water/Sewer: Normal Operations

IT/Telecommunications: Normal Operations

Food/Agriculture: Normal Operations

Postal/Shipping: Normal Operations

Government: Normal Operations

Other:

LOGISTICS

Volunteer Support: None

Military Support: None

Resource Distribution: None

Air Operations: None

Auxiliary Power None

Warehouse/Staging Activity: None

Donations Management: None

REGIONAL ACTIVITIES

Western Region: None

Capital Region: None

Southern Region: None

Central Region: None

Eastern Region: None

WEATHER

Forecast: Not applicable

Incident Intelligence

Source, Date/Time and Summary

Report or Summary: **Kolkata,** India; May 22 About 2,324 cases of people suffering from fever and flu like symptoms have been reported from the Birbhum district in the last five days.

Open source

"The West Bengal Government is failing to understand the gravity of the situation," said Union Minister of State for Health and Family Welfare P Lakshmi, during a visit to Birbhum on Tuesday.

Lakshmi, who is currently in the state to get a first hand assessment, did not find adequate health infrastructure to combat the flu threat. She criticized the state government for acting irresponsibly and lacking seriousness to fight the disease.

"There is no infrastructure, not even qualified doctors. We have sent pills and gear but the required equipment is not in place till date. They do not understand that this is an emergency situation and they should be prepared for it," she added.

She blamed the state medical association for the spread of the virus to new areas, as it recommended against travel and meeting restrictions because of the poor public image it would have given local doctors.

The state government, however, maintained that there has been no case of H7N3 virus infecting humans, and tried to play down its own figures of fever cases in Birbhum.

"There is no need to panic. We do not have any reports of humans being infected. Therefore, a few hundred fever cases means nothing," said Sanchita Bakshi, state director health services.

According to the status report, as many as 707 fever cases were reported from Birbhum district on May 18.

A day later and another 304 people were added to the list.

On May 21, 707 more cases were added to the existing figures and today an additional 613 cases of fever were recorded.

The report further stated that that six central rapid response teams are assisting the state government in caring for the sick and dying.

Report or Summary: **DHMH Secretary of Health ORDER**

WHEREAS, I, John M. Colmers, Secretary of Health and Mental Hygiene of the State of Maryland, in response to the recent diagnoses of human cases of novel influenza A virus infection, recognize that it is of the utmost necessity to provide immediate health care to infected individuals and to prevent further exposure of individuals to the disease; and

WHEREAS, In order to provide this health care and prevent further exposure of individuals to this disease, it is crucial that healthcare providers, including healthcare facilities, cooperate with the Department of Health and Mental Hygiene ("DHMH") and report expeditiously possible human cases of novel influenza A virus infection.

NOW, THEREFORE, Pursuant to the authority vested in me by the laws of Maryland, including but not

Source, Date/Time and Summary

limited to, Maryland Code Annotated, Health-General §§ 2-102, 2-104, 2-105, 2-108, 4-305(b)(3), 18-101, 18-102, 18-103, 18-201, 18-202, 18-205, and 18-208, 18-901, 18-902, 18-904, 18-905 and Code of Maryland Regulations (COMAR) 10.06.01.03, .04, and .06, I HEREBY ORDER that all healthcare providers and healthcare facilities report immediately to the local health officer in the jurisdiction in which the healthcare provider or facility is located any suspected human case of novel influenza A virus infection.

Report or Summary:
Report or Summary:
Report or Summary:

Event Title: 2008 Influenza Pandemic

Event Start date: March 15, 2008
Report date and Time: June 15, 2008: 5 pm
Report Number: #4
Report Created By: DHMH/ OP&R
Contact Information: OP&R
Phone: **DHMH Call Center: 866.829.5240; Fax: 410.225.0378** (OP&R Office 410.767.0823)
Email: Prepared@dhmh.state.md.us

SITUATIONAL SUMMARY

Situation Summary From Start:

1) *March 2008:* The international community and national health agencies have initiated the investigation of patients presenting with Influenza like Illness (ILI) in overseas locations in the mid and far east. These influenza cases are suspected to be caused by a novel flu virus.
2) *April 2008:* WHO and the US have both elevated their pandemic influenza ratings. There have been clusters of out breaks in overseas countries predominately in Asia. However, suspected cases were identified in European countries as well as several US ports of entry. The virus has been identified as a novel Type A H7 N3 virus.
    a) The *WHO Suspected Case definition* is as follows:
        i) Fever: equal to or greater than 100.4 F/ 38.2 C;
        ii) Severe productive cough occasionally bloody;
        iii) Exposure: Residence or travel to any region with a case of the novel strain.
3) *May 19, 2008:* ***Week 1 of the US pandemic Wave***.

WHO has declared a pandemic and WHO Phase 6 and US Stage 4. Epidemiological investigation has demonstrated a35% attack rate and 30% mortality rate. The first cases have been confirmed in the United States. Maryland has only suspected cases.

Situation Update / Summary Since Last Report:

US Pandemic Week 4

1) International:
- *a) WHO Phase 6: Sustained Human to human transmission of the virus.*
- b) WHO continues to monitor the international impact of the pandemic.
- c) Several countries are reporting civil disturbances and loss of essential services.
    - i) This is especially significant in third would countries.
- d) As expected the death rates in these countries is approximately 70%.
- e) Several "Pandemic" refuges are fleeing their countries with the resulting further spread of the virus.
- f) The WHO reports severe shortages of food, medical supplies and health care providers as all sectors of communities are affected especially within the healthcare sector.

2) United States:
- a) *US Stage has been elevated to US Stage 5*: Spread through out the United States.
- b) *CDC Recommends activation of Pan Flu Plans* for the nation including those areas not affected.
- c) The CDC recommends enforcement of non-pharmaceutical containment measures in those communities least affected.
- d) Travel has been restricted.
- e) Multiple cases have been reported across the nation. There is a reported 50% absenteeism in the most affected areas of the country.
- f) The SNS and Managed Inventory have been requested by several states.
    - i) Delivery has been hampered by the lack of personnel as well as diversion of equipment and supplies to other national priorities.
- g) National Guard units have been activated for law enforcement and support of critical infra-structure.

3) **Maryland: Maryland Pan Flu Plan: Pages 35-79**
http://bioterrorism.dhmh.state.md.us/flu.htm
DHMH - PanFlu Plan - Version 7.2
- a) DHMH Command Center continues to assess the impact of pan flu and to coordinate the

health and medical response.

b) The impact of the pandemic is becoming evident in Maryland.
c) MIEMSS has issues Press release describing Emergency Department overcrowding.
d) *The Secretary has declared a Catastrophic Health Emergency*. The declaration encompasses the institution of non-pharmaceutical community containment issues including: liberal leave; work from home; voluntary isolation for the sick; quarantine for exposed individuals; restriction of social gatherings and school closures.
e) *Directive Of The Secretary Of Health And Mental Hygiene For Quarantine And Isolation*
f) The *Medical system has reached near capacity* as a result in the shrinkage of the workforce and the increased number of ill patients presenting to the emergency departments.
g) There are several clusters of illness through the state.
h) The most densely populations regions of Maryland have been affected the most.
i) Several critical-infra-structure and key resources within Maryland have been affected.
    i) Most significant has been the food industry with several restaurant closures and reduced goods on the shelves.
    ii) Electrical demand is at the highest levels (approximately 150% that of super bowel weekend).
        (1) There have been some reported brown outs in Maryland counties.
j) Maryland has requested the Strategic National Stockpile and Managed Inventory to provide medication, supplies and equipment for the healthcare systems.

SITUATIONAL ANALYSIS AND ASSESSMENT

Assessment and Planning:

US Pandemic Week:4

WHO has officially declared an Influenza Pandemic. WHO Phase 6: sustained human to human transmission of the virus. The pandemic has been wide spread in the Asian and European continents. The US is at Stage 5 with variation of impact from large clusters to wide spread influenza illness in states.

Several states have reported high incidences of plan flu. These include Hawaii, California, Texas, New York, Illinois, Massachusetts, Florida and Pennsylvania. Maryland is reporting mild to moderate cases statewide.

DHMH recommendations:

1) Continue the recommendation made previously.
2) Critical infra-structure should pre-deply anti-viral medications to essential staff and their household family members.
    a) These medication are to taken only for treatment when directed by their physician or if they develop the following symptoms:
        i) fever 101,
        ii) body aches,
        iii) cough, respiratory symptoms
        iv) exposure to a sick individual.

EXECUTIVE ACTION

Federal Declarations:

Date/Time, Title, Summary

April 25, 2008: *US Stage has been elevated to US Stage 2:* Confirmed Outbreak overseas. This parallels the *WHO elevation to WHO Phase 4-5:* small to larger localized clusters with limited human to human transmission and poor adaptation to humans. The CDC has issued a Pandemic Alert.

May 19, 2008: The US stage has been at US Stage 3: Widespread outbreaks in multiple overseas locations. However, given the recent epidemiological findings it has been elevated a second time. *The*

EXECUTIVE ACTION

current US Stage is US Stage 4: First human cases in North America and /or the United States.

State of Emergency:

June 1, 2008: The president makes a federal disaster declaration giving broad powers to Health and Human Services to combat the pandemic. Only essential federal employees are required to report for work if they are not sick. There is liberal leave and work from home.

June 17, 2008: The Governor Declares a State of Emergency.

Date/Time, Title, Summary

Catastrophic Health Care Declaration:

June 11, 2008: The DHMH Secretary has declared a Catastrophic Health Emergency.

Date/Time, Title, Summary

The declaration encompasses the institution of non-pharmaceutical community containment issues including: liberal leave; work from home; voluntary isolation for the sick; quarantine for exposed individuals; restriction of social gatherings and school closures.

Executive Orders:

Date/Time, Title, Summary

Order:

June 14, 2008: DHMH Secretary's Order: Isolation and Quarantine: All individuals who are sick or have been exposed to sick individuals are to remain in their homes.

Order:

Order:

Order:

DHMH Command /Coordination Center:

1. DHMH has activated it's command/coordination center and is staffing it 24/7
    a. DHMH has continued to monitor international developments and is conducting daily discussions in preparation for the pandemic.
    b. DHMH is assessing the healthcare system to determine potential gaps in the ability to deliver healthcare.
    c. DHMH is making recommendations for personal and community preparedness.
2. The healthcare system, response partners and critical infra-structure have been notified and advised to review their pan flu plans in preparation for a pandemic.
3. Public Service Messages regarding the use of clean hygiene, cough etiquette and voluntary quarantine have been running in all media.

DHMH Executive Command Center:

Operational as of June 1, 2008 Pandemic Week 2.

EOC Activation:

List all EOCs Activated by County and function i.e. LHD.

MEMA SEOC: has activated to Level 1.

HUMAN SERVICES

Total Casualties:

Total Cumulative Hospital Admissions and Deaths In Maryland During the preceding 4 weeks of the pandemic.

	Hospital Admissions	Deaths from Influenza
Maryland	18,834	1,690
Allegany County	280	28
Anne Arundel County	1,694	150

HUMAN SERVICES

Baltimore County	2,818	268
Baltimore City	2,130	193
Calvert County	284	24
Caroline County	112	10
Carroll County	566	50
Cecil County	331	29
Charles County	433	36
Dorchester County	117	11
Frederick County	724	63
Garrett County	108	10
Harford County	795	71
Howard County	854	72
Kent County	78	8
Montgomery County	3,145	284
Prince George's County	2,625	219
Queen Anne's County	160	15
Somerset County	95	9
St. Mary's County	316	27
Talbot County	145	15
Washington County	508	47
Wicomico County	318	29
Worcester County	197	21

Shelter Operations: Limited shelter operations have been established in Baltimore City and Prince George's County for the homeless and to allow for limited medical evaluation.

Give summary of locations
School System: Several schools in the most affected regions of Maryland have been closed. As of June 11 and the DHMH secretary's declaration they have been closed.

EMERGENCY SERVICES

Health and Medical: See Below for Public Health and Healthcare critical infra-structure.

Law Enforcement: Although there is a reported reduction in crime there is also a reduction in the number of officers reporting for duty. The majority of calls are for domestic disturbances related to frustrated and desperate residents. They are finding it difficult to enforce

EMS: Both public and private EMS services are stretched thin as a result of reduced providers and a dramatically increased number of calls.

Fire and Rescue: None

Search and Rescue: None

INFRASTRUCTURE

Public Health: Public health and medical sector are operating at near maximum capacity. The are approximately 97,000 healthcare workers in the hospitals with almost 50% absent either because of illness or caring for sick family members or voluntary quarantine. Health care capacity in Maryland is licensed for 11,000 beds. Hospital occupancy at most facilities is approaching 110% with a statewide average of 90%. Several local EOCs are reporting increased requests for manpower as well as equipment and supplies.

Energy: Operations and delivery of services have been affected by staff/employee absenteeism resulting not only in the reduction of services but also maintenance of equipment. Coal and gas fired generation units are at reduced capacity while nuclear production is at park operations

Transportation: Most public transportation workers have been told to stay home as a result of the catastrophic Health Care Declaration and the enforcement of social distancing. Commercial transportation has been hindered by the lack of fuel and employees. Several unions are threatening both job and legal actions related to the failure

INFRASTRUCTURE

of companies to pay employees their sick and vacation pay.

Banking and Finance: Banking has been moderately unaffected. Banks closed down their teller windows and have increased their business transactions through ATMs. The delivery of cash to replenish the ATMs has been affected by staffing and transportation issues. Smaller community banks have been affected the most. Resulting in

Utilities/Water/Sewer: Water and utilizes have been marginally affected at this time due to their ability to operate at maximum capacity with less that essential staff at the treatment plants. However, the delivery of chemicals has been curtailed. They are currently using their onsite stocks of chemicals. The electrical brown out have affected the pumping capabilities resulting in spot shut downs of the facilities.

IT/Telecommunications: IT and Telecommunications have been stressed by the increased utilization by residents who are at home. The major Telecommunications companies have preferentially reduced services to non-critical customers. There have been reported spot outages of communications platforms.

Food/Agriculture: Food delivery and production is affected. Transportation of food from outside Maryland has been severely hampered. Migrant agricultural workers have been unable to come to Maryland. Those currently here are not reporting for work due to increased illness related to failure to have access to sufficient care.

Postal/Shipping: Due to high absenteeism postal operations have been curtailed.

Government: Government operations are transitioning to the provision of essential services only similar to that of liberal leave associated with snow days. Essential staff are reporting for duty but a significant number are reporting in sick.

Other:

LOGISTICS

Volunteer Support: None
Military Support: None
Resource Distribution: None
Air Operations: None
Auxiliary Power None
Warehouse/Staging Activity: None
Donations Management: None

REGIONAL ACTIVITIES

Western Region: Several counties have activated their local emergency management agencies. Local health department have either established their own command centers or are operating at their local EOC.

Capital Region: Several counties have activated their local emergency management agencies. Local health department have either established their own command centers or are operating at their local EOC.

Southern Region: Several counties have activated their local emergency management agencies. Local health department have either established their own command centers or are operating at their local EOC.

Central Region: Several counties have activated their local emergency management agencies. Local health department have either established their own command centers or are operating at their local EOC.

Eastern Region: Several counties have activated their local emergency management agencies. Local health department have either established their own command centers or are operating at their local EOC.

WEATHER

Forecast: Not applicable

Incident Intelligence

Source, Date/Time and Summary

Report or Summary: **Declaration of National Emergency by Reason Of Pandemic Influenza**
By the President of the United States of America
A Proclamation :
A national emergency exists by reason of the international Influenza Pandemic and the continuing and

Source, Date/Time and Summary

immediate threat on the United States as the result of impacts on the integrity and fabric of society and its citizens.

NOW, THEREFORE, I, the President of the United States of America, by virtue of the authority vested in me as President by the Constitution and the laws of the United States, I hereby declare that the national emergency has existed since May 39, 2008, and, pursuant to the National Emergencies Act (50 U.S.C. 1601 et seq.), I intend to utilize the following statutes: sections 123, 123a, 527, 2201(c), 12006, and 12302 of title 10, United States Code, and sections 331, 359, and 367 of title 14, United States Code.

This proclamation immediately shall be published in the Federal Register or disseminated through the Emergency Federal Register, and transmitted to the Congress.

This proclamation is not intended to create any right or benefit, substantive or procedural, enforceable at law by a party against the United States, its agencies, its officers or any person.

IN WITNESS WHEREOF, I have hereunto set my hand this thirtieth day of May, in the year of our Lord two thousand eight, and of the Independence of the United States of America the two hundred and twenty-sixth.

Report or Summary:

FOR IMMEDIATE RELEASE

Hospital Emergency Departments Nearing Capacity

Baltimore, MD (June 15, 2008) – The Maryland Institute for Emergency Medical Services Systems (MIEMSS) announced today that hospital Emergency Departments throughout Maryland continue to experience a significant increase in the number of patient visits. Representatives from fire department Emergency Medical Services programs, hospital emergency departments, and local health departments have been monitoring Yellow Alert activity at the area hospitals. A Yellow Alert indicates that a hospital emergency department is experiencing a temporary overload and requests ambulances to transport patients with non-life-threatening conditions to another hospital if possible. However, even when on Yellow Alert, area hospitals remain open to treat seriously ill or injured patients.

Many patients coming to the emergency departments are experiencing flu-like symptoms. To protect themselves and minimize the spread of the flu disease, MIEMSS encourages those experiencing mild to moderate flu-like symptoms (headache, sore throat, cough, runny or stuffy nose, muscle aches, fever under 100 degrees Fahrenheit, nausea, vomiting, or diarrhea) to stay home to care for themselves or loved ones, avoid public places, and, if necessary, access other primary sources of health care, such as contacting their primary care doctors or community medical clinics. This will assist in reducing the volume of calls to 9-1-1 and emergency department visits, and ensure that valuable space is available for severely ill and critical patients. Dr. Robert Bass (Executive Director of MIEMSS) stressed that Maryland's emergency care providers are there when you need them but emphasized that "when calling 9-1-1, be sure there is a true emergency situation."

The public should seek medical help for the following risk exposure or symptoms:

- Temperature of 100 degrees Fahrenheit and/or cough or sore throat AND
  - Traveled to Asia or out of state within the last 10 days; OR
  - Exposure to ill persons who traveled to countries with pandemic flu within the last 10 days—China, Thailand, Indonesia, Cambodia, or Vietnam.
- Difficult or rapid/painful breathing
- Mental confusion, dizziness, or fainting
- Dehydration (feeling of dry mouth or excessive thirst)
- Coughing up yellow mucous
- Ashen color skin
- Return of fever or cough after you have improved
- Worsening of an existing serious medical condition (heart or lung disease, diabetes, HIV, cancer)
- Flu symptoms that last more than 10 days

Incident Intelligence

Source, Date/Time and Summary

The Maryland Department of Health and Mental Hygiene (DHMH) reported three suspected H5N1 flu virus cases in Baltimore, Talbot, and Prince George's counties on July 31. Tests are currently being conducted at the Centers for Disease & Prevention (CDC) to confirm that the patients have the H5N1 virus infection.

Residents with questions are advised to call the DHMH Hot Topics Hotline at 1-866-866-2769 **(NOT OPERATIONAL FOR EXERCISE).**

Information about the current strain of pandemic influenza is available on the Maryland website at *www.flu.Maryland.gov* and on the CDC website at *www.cdc.gov*. (**WEBSITES NOT UPDATED FOR EXERCISE PLAY).**

Report or Summary: June 14, 2008

DIRECTIVE OF THE SECRETARY OF HEALTH AND MENTAL HYGIENE FOR QUARANTINE AND ISOLATION

In accordance with Maryland law and consistent with established medical practices designed to prevent or reduce the spread of the disease or outbreak caused by exposure to a deadly agent, it is hereby

ORDERED by the Secretary of Health and Mental Hygiene, ("Secretary") that the sites and areas named in the attached Quarantine and Isolation List are established as places of treatment, isolation, and quarantine; and it is further

ORDERED by the Secretary that the individuals and groups of individuals identified or described in the attached Quarantine and Isolation List shall [*go to*][*remain in*] the established quarantine and isolation areas and sites; and it is further

ORDERED by the Secretary that the individuals and groups of individuals ordered to go to the established quarantine or isolation areas or sites go to those areas or sites commencing at 9:00 a.m. on the 14 day of __June__, 2008_; and it is further

ORDERED by the Secretary that the individuals and groups of individuals identified or described in the attached Quarantine and Isolation List remain in the quarantine or isolation areas or sites until the Secretary determines that they no longer pose a substantial risk of transmitting the deadly agent to the public.

1. This Directive of the Secretary of Health and Mental Hygiene is issued pursuant to Section 18-905(b)(2) of the Health-General Article, which authorizes the Secretary to respond to a catastrophic health emergency in accordance with an order of the Governor.

2. On June 11 2008 the Secretary issued a Proclamation, pursuant to Maryland Code Annotated, Public Safety § 14-3A-02, finding that a catastrophic health emergency existed in Maryland. Then, pursuant to Sections 14-3A-03(b)(3)(iii) and (iv) of the Public Safety Article, the Governor ordered the Secretary to establish places of treatment, isolation, and quarantine, and to require individuals

and groups of individuals to [*go to*] and [*remain at*] places of ***Home*** quarantine and isolation.

3. The Governor's Proclamation was issued after medical authorities diagnosed an outbreak of *Pandemic Influenza*, a disease that can cause widespread deaths throughout Maryland in the absence of immediate prophylactic measures.

4. A description of the disease is set forth in the attached affidavit signed by the Secretary, which is incorporated by reference into the body of this document.

5. The Centers for Disease Control and Prevention (CDC) of the United States Department of Health and Human Services concurs in the recommendations of Maryland's medical experts that immediate steps must be undertaken to minimize the further spread of this disease outbreak.

6. The individuals or groups of individuals identified or described in the attached Quarantine and Isolation List are those whom the Secretary has determined through his investigation were exposed to the deadly agent or who came into contact with infected individuals, and are, thus, at substantial risk of having been infected with the deadly agent.

7. To prevent or reduce the spread of the deadly agent, it is medically necessary and reasonable for the individuals or groups of individuals listed above to [*go to*][*remain in*] the established quarantine or isolation areas or sites until the Secretary has determined that they no longer pose a substantial risk of transmitting the disease to the public.

FAILURE TO COMPLY WITH THE DIRECTIVE

Failure to comply with the terms of this Directive may result in criminal prosecution under Section 18-907 of the Health-General Article with penalties including imprisonment and a fine.

AVAILABILITY OF A HEARING TO CONTEST DIRECTIVE

The individuals subject to this Directive may request a hearing to contest the Secretary's action described in this Directive. The hearing will be held in the Circuit Court of Maryland. A request for a hearing will not stay or enjoin the Secretary's action. Md. Code Ann., Health-Gen. § 18-906(b)(2). The circuit court will conduct the hearing within three days of receipt of the hearing request, unless the Court grants an extension under Section 18-906(b)(4) of the Health-General Article. To request a hearing an individual must send a written request to:

_____

[Judge Handling Emergency Matters]

The Circuit Court of _____, Maryland

[address]

with a copy to:

Incident Intelligence

Source, Date/Time and Summary

Office of the Attorney General

300 West Preston Street

Suite 302

Baltimore, Maryland 21201.

If an individual does not request a hearing in writing and does not send the request to the Judge Handling Emergency Matters and the Office of the Attorney General, they will have waived their rights to contest the Secretary's Directive.

A request for a hearing does not guarantee that an individual will be able to personally appear in court. Md. Code Ann., Health-Gen. § 18-906. Therefore, the request for a hearing shall include the name, address, and telephone number of the attorney representing the individual in this matter and their authorized representative. The court will appoint counsel, if the individual is not otherwise represented. Md. Code Ann., Health-Gen. § 18-906.

This Directive is given under my hand this _14th_ day of _June__ 2008.

Report or Summary: June 17, 2008

STATE OF MARYLAND

EXECUTIVE DEPARTMENT

EXECUTIVE ORDER

01.01.20[ ].[ ]

Declaration of Public Emergency

WHEREAS, The Governor of the State of Maryland, have been advised and informed by the Maryland Emergency Management Agency, and the Departments of Health and Mental Hygiene that emergency conditions exist throughout much of the State;

WHEREAS, Various indicators such as the number of sick residents, hospital overcrowding, deterioration of critical infra-structure and resources show that a public crisis has developed

in Maryland;

WHEREAS, The adverse impacts of such conditions are already being realized, including increased incidents of failure to provide medical care for sick residents, civil and social unrest and violence resulting in increased number of fatalities;

WHEREAS, These occurrences threaten our natural resources and the public health, safety and welfare; and the well being of all Maryland residents,

WHEREAS, Title 14 of the Public Safety Article of the Annotated Code of Maryland ("Public Safety Article") confers powers on the Executive, including the power to declare a public emergency and to direct that measures be taken to protect the public health, safety and welfare.

NOW, THEREFORE, Pursuant to the authority vested in me by the Constitution and Laws of the State of Maryland, including but not limited to Title 14 of the Public Safety Article, I, the GOVERNOR OF THE STATE OF MARYLAND, PROCLAIM THAT A STATE OF EMERGENCY EXISTS IN THE STATE OF MARYLAND.

A. I HEREBY direct the Secretary of Health and Director of MEMA to mobilize all resources needed to plan and respond to this natural disaster.

B.I HEREBY request that all citizens, businesses, industries and community organization of the State voluntarily comply with public health directives for the protection and well being of our residents.

C.I HEREBY urge everyone to avoid public gatherings, remain at home if you are sick or have been exposed to sick individuals, and support civil authorities in their efforts to provide and care for our families, neighbors and fellow residents.

GIVEN Under My Hand and the Great Seal of the State of Maryland in the City of Annapolis, this _17th_ day of _June, 2008_.

Report or Summary:

(Back)

Event Title: 2008 Influenza Pandemic

Event Start date: March 15, 2008
Report date and Time: July1, 2008: 2 pm
Report Number: #5
Report Created By: DHMH/ OP&R
Contact Information: OP&R
Phone: **DHMH Call Center: 866.829.5240; Fax: 410.225.0378** (OP&R Office 410.767.0823)
Email: Prepared@dhmh.state.md.us

SITUATIONAL SUMMARY

Situation Summary From Start:

1) *March 2008:* The international community and national health agencies have initiated the investigation of patients presenting with Influenza like Illness (ILI) in overseas locations in the mid and far east. These influenza cases are suspected to be caused by a novel flu virus.
2) *April 2008:* WHO and the US have both elevated their pandemic influenza ratings. There have been clusters of out breaks in overseas countries predominately in Asia. However, suspected cases were identified in European countries as well as several US ports of entry. The virus has been identified as a novel Type A H7 N3 virus.
    a) The *WHO Suspected Case definition* is as follows:
        i) Fever: equal to or greater than 100.4 F/ 38.2 C;
        ii) Severe productive cough occasionally bloody;
        iii) Exposure: Residence or travel to any region with a case of the novel strain.
3) *May 19, 2008:* ***Week 1 of the US pandemic Wave***, WHO has declared a pandemic and WHO Phase 6 and US Stage 4. Epidemiological investigation has demonstrated a35% attack rate and 30% mortality rate. The first cases have been confirmed in the United States. Maryland has only suspected cases.
4) *June 15, 2008:* ***US Pandemic Week 4:*** WHO Phase 6 and US Stage 5. Pan Flu has spread worldwide with severe impact on third world countries with resulting social unrest resulting from scarce resources of medical care, food and water as well as wide spread death. CDC recommended activation of pan flu plans with enforcement of non-pharmaceutical containment interventions. SNS/VMI has been pre-deployed by CDC. National Guard has been activated in several states. Maryland reports clusters of disease statewide with ED over-crowding. Anti-viral medications have been distributed to essential employees of critical infra-structure with instructions that they are to only be taken when sick.

Situation Update / Summary Since Last Report:

US Pandemic Week 6

1) International:
    a) *WHO Phase 6: Sustained Human to human transmission of the virus.*
    b) Worldwide impact of flu is evident. There has been an estimated 2 million deaths, mostly in third world countries.

2) United States:
    a) *US Stage has been elevated to US Stage 5*: Spread through out the United States.
    b) Pan Flu plans have been activated across and travel has been restricted.
    c) Absenteeism remains high in the hardest hit locals.
    d) The SNS and Managed Inventory continue to be shipped although with delays with decreasing inventory.

3) **Maryland: Maryland Pan Flu Plan: Pages 35-79**
http://bioterrorism.dhmh.state.md.us/flu.htm
DHMH - PanFlu Plan - Version 7.2
    a) DHMH Command/Coordination center is operating at full capacity.
    b) Pan Flu has impacted several sectors of society with mounting affects.
    c) There are significant number of cases throughout Maryland with most cases in densely populated regions.
    d) Hospital over crowding continues with all regions and health care providers affected.
    e) *Directive Of The Secretary Of Health And Mental Hygiene For Quarantine And Isolation*
    f) The need for medical care has reached capacity.
    g) Several critical-infra-structure and key resources within Maryland have been affected.

SITUATIONAL SUMMARY

Service industries have been hardest hit due to high absenteeism. Producers have been affected by the lack of resources resulting from reduced transportation capacity.

h) Maryland Emergency Management Agency has been at full functional activation to support and coordinate state response as well as regional response with neighboring states. There is little available support from Maryland's neighbors.

SITUATIONAL ANALYSIS AND ASSESSMENT

Assessment and Planning: ***US Pandemic Week:6***

The worldwide situation has worsened as it has in the US and Maryland. Pan flu has impacted all age groups and segments of society. The number of Maryland cases regionally varies but is considered widespread. Resources of all types are in short supply related to absent employees, inability to obtain materials and supplies resulting in decreased production and provision of services. In addition there are threats to critical infra-structure as a result of physical plant deterioration.

DHMH recommendations:

1) Continue the recommendation made in previous sit reps, public health directives and public messaging.
   a) Recovering employees who can return to work should be in positions where they can interact with the public.

EXECUTIVE ACTION

Federal Declarations:

Date/Time, Title, Summary

April 25, 2008: *US Stage has been elevated to US Stage 2:* Confirmed Outbreak overseas. This parallels the *WHO elevation to WHO Phase 4-5:* small to larger localized clusters with limited human to human transmission and poor adaptation to humans. The CDC has issued a Pandemic Alert.

May 19, 2008: The US stage has been at US Stage 3: Widespread outbreaks in multiple overseas locations. However, given the recent epidemiological findings it has been elevated a second time. *The current US Stage is US Stage 4: First human cases in North America and /or the United States.*

June 1, 2008: The president makes a federal disaster declaration giving broad powers to Health and Human Services to combat the pandemic. Only essential federal employees are required to report for work if they are not sick. There is liberal leave and work from home.

State of Emergency:

June 17, 2008: The Governor Declares a State of Emergency.

Date/Time, Title, Summary

Catastrophic Health Care Declaration:

June 11, 2008: The DHMH Secretary has declared a Catastrophic Health Emergency.

The declaration encompasses the institution of non-pharmaceutical community containment issues including: liberal leave; work from home; voluntary isolation for the sick; quarantine for exposed individuals; restriction of social gatherings and school closures.

Date/Time, Title, Summary

Executive Orders:

Date/Time, Title, Summary

Order:

June 14, 2008: DHMH Secretary's Order: Isolation and Quarantine: All individuals who are sick or have been exposed to sick individuals are to remain in their homes.

Order:

Order:

EXECUTIVE ACTION

Order:

DHMH Command /Coordination Center:

1. DHMH command/coordination center remains functional and continues to coordinate ESF 8: Public Health and Medical aspects of the pandemic.
2. Public Service Messages regarding the use of clean hygiene, cough etiquette and voluntary quarantine have been running in all media.

DHMH Executive Command Center:

Continues to operate and support DHMH operations and provide the governor and the cabinet with updates and recommendations.

EOC Activation:

List all EOCs Activated by County and function i.e. LHD.

MEMA SEOC continues at full activation status.

HUMAN SERVICES

Total Casualties:

Total Cumulative Hospital Admissions and Deaths In Maryland During the preceding 4 weeks of the pandemic.

	Data as of 15 June 08 Week 4		Data as of 1 July Week 6	
	Admissions	**Deaths**	**Admissions**	**Deaths**
Maryland	18,834	1,690	28,251	4,225
Allegany County	280	28	420	69
Anne Arundel County	1,694	150	2,540	376
Baltimore County	2,818	268	4,227	670
Baltimore City	2,130	193	3,195	482
Calvert County	284	24	426	60
Caroline County	112	10	168	26
Carroll County	566	50	849	126
Cecil County	331	29	497	73
Charles County	433	36	650	90
Dorchester	117	11	176	29
Frederick	724	63	1,086	158
Garrett	108	10	162	26
Harford	795	71	1,193	177
Howard	854	72	1,281	181
Kent	78	8	117	20
Montgomery	3,145	284	4,717	711
Prince George's	2,625	219	3,937	547
Queen Anne's	160	15	239	37
Somerset County	95	9	142	22
St. Mary's County	316	27	475	67
Talbot County	145	15	217	38

HUMAN SERVICES

Washington	508	47	761	119
Wicomico County	318	29	476	73
Worcester County	197	21	296	51

Shelter Operations: Limited shelter operations have been established in Baltimore City and Prince George's County for the homeless and to allow for limited medical evaluation.

Give summary of locations

School System: Schools remain closed by order of the DHMH Secretary. Some schools and universities are attempting to provide services to students in quarantine/isolation.

EMERGENCY SERVICES

Health and Medical: See Below for Public Health and Healthcare critical infra-structure.

Law Enforcement: Domestic issues continue to represent the majority of crime. There is increased violence and LE is doing the best they can in the face if manpower limitations.

EMS: EMS is having difficulties in responding to calls. 911 call centers are starting to triage pan flu calls.

Fire and Rescue: Suppression and rescue capability is reduced as a result of absenteeism.

Search and Rescue: None

INFRASTRUCTURE

Public Health: Public health and medical sector is operating over capacity with stress related to decreased staff, equipment and supplies. Hospitals have distributed all anti-viral medications to staff and their families for treatment purposes only. The system is operating in "disaster" level maximizing surge capacity within facilities. Several hospitals hace established alternative care sites and triage sites for less tah critical patients. Lab services can not keep up with demand.

Energy: Operations and delivery of services have been affected by staff/employee absenteeism resulting not only in the reduction of services but also maintenance of equipment. Coal and gas fired generation units are at reduced capacity while nuclear production is at park operations. Several rolling brown outs are occurring regularly putting greater stress on auxiliary power generating at other critical infra-structure sectors. However, lack of fuel to power the generators is resulting in failure.

Transportation: Public transportation continues to operate in very limited capacity. Major shipping companies are marginal at best.

Banking and Finance: Banking has been moderately unaffected with focus on financial market activities as well as retail services through electronic fund transfer. The economic impact is starting to affect all sectors of society.

Utilities/Water/Sewer: Water and utilizes have been marginally affected at this time due to their ability to operate at maximum capacity with less that essential staff at the treatment plants. However, the delivery of chemicals has been curtailed. They are currently using their onsite stocks of chemicals. The electrical brown out have affected the pumping capabilities resulting in spot shut downs of the facilities.

IT/Telecommunications: IT and Telecommunications have been stressed by the increased utilization by residents who are at home. The IT/Telecommunications companies have continued preferential service to those essential critical infra-structure sectors. There have been reported spot outages of communications platforms.

Food/Agriculture: Food delivery and production is affected. There are major difficulties in food delivery and distribution

Postal/Shipping: Due to high absenteeism postal operations have been curtailed.

Government: Government operations are operating only with essential staff and operations. Several entitlement program have been hindered due to decreased staff.

Other:

LOGISTICS

Volunteer Support: Several volunteer organizations have been asked to assist in critical areas.

Military Support: DOD has mobilized resources for continued support of essential operations in the public sector. National guard units continue to be active in several areas of Maryland.

Resource Distribution: None

Air Operations: None

Auxiliary Power Operating but limited due to fuel availability issues.

Warehouse/Staging Maryland SNS/RSS site continues to operate but activity is hampered by lack of shipments from

LOGISTICS

Activity: CDC.
Donations Management: None

REGIONAL ACTIVITIES

Western Region: All counties in the region are operating at maximum capacity with limited resources that are available. Several report lack of food and water to maintain staff during operational periods..

Capital Region: All counties in the region are operating at maximum capacity with limited resources that are available. Several report lack of food and water to maintain staff during operational periods.

Southern Region: All counties in the region are operating at maximum capacity with limited resources that are available. Several report lack of food and water to maintain staff during operational periods.

Central Region: All counties in the region are operating at maximum capacity with limited resources that are available. Several report lack of food and water to maintain staff during operational periods.

Eastern Region: All counties in the region are operating at maximum capacity with limited resources that are available. Several report lack of food and water to maintain staff during operational periods.

WEATHER

Forecast: Warm and hot weather as expected for the season.

Incident Intelligence

Source, Date/Time and Summary

Limited availability of open source Intel given limited News capabilities.

Report or Summary:

Report or Summary:
Report or Summary:
Report or Summary:
Report or Summary:

(Back)

(Back)

Event Title: 2008 Influenza Pandemic

Event Start date: March 15, 2008
Report date and Time: July24, 2008: 1 pm
Report Number: #7
Report Created By: DHMH/ OP&R
Contact Information: OP&R
Phone: **DHMH Call Center: 866.829.5240; Fax: 410.225.0378** (OP&R Office 410.767.0823)
Email: Prepared@dhmh.state.md.us

SITUATIONAL SUMMARY

Situation Summary From Start:

1) *March 2008:* The international community and national health agencies have initiated the investigation of patients presenting with Influenza like Illness (ILI) in overseas locations in the mid and far east. These influenza cases are suspected to be caused by a novel flu virus.
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        i) Fever: equal to or greater than 100.4 F/ 38.2 C;
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4) *June 15, 2008:* ***US Pandemic Week 4:*** WHO Phase 6 and US Stage 5. Pan Flu has spread worldwide with severe impact on third world countries with resulting social unrest resulting from scarce resources of medical care, food and water as well as wide spread death. CDC recommended activation of pan flu plans with enforcement of non-pharmaceutical containment interventions. SNS/VMI has been pre-deployed by CDC. National Guard has been activated in several states. Maryland reports clusters of disease statewide with ED over-crowding. Anti-viral medications have been distributed to essential employees of critical infra-structure with instructions that they are to only be taken when sick.
5) *July 1 2008:* ***US Pandemic Week 6:*** WHO Phase 6 and US Stage 5. The pandemic continues throughout the world, the United States and Maryland. There is severe disruption in all critical infra-structure and key resource sectors. The worldwide situation has worsened as it has in the US and Maryland. Pan flu has impacted all age groups and segments of society. The number of Maryland cases regionally varies but is considered widespread. Resources of all types are in short supply related to absent employees, inability to obtain materials and supplies resulting in decreased production and provision of services. In addition there are threats to critical infra-structure as a result of physical plant deterioration. ***(note: at this time due to staffing and resource issues Sit Rep #6 is unavailable for publication).***

Situation Update / Summary Since Last Report:

US Pandemic Week 8

1) International:
    a) *WHO Phase 6: Sustained Human to human transmission of the virus.*
    b) Worldwide impact of flu is evident. There has been an estimated 2 million deaths, mostly in third world countries.
2) United States:
    a) *US Stage has been elevated to US Stage 5*: Spread through out the United States.
    b) Pan Flu plans have been activated across and travel has been restricted.
    c) Absenteeism remains high in the hardest hit locals.
    d) The federal government has continued to focus response efforts on the healthcare system, national economy as well as Tier 1 critical Infra-structure.

SITUATIONAL SUMMARY

3) **Maryland: Maryland Pan Flu Plan: Pages 35-79**
http://bioterrorism.dhmh.state.md.us/flu.htm
DHMH - PanFlu Plan - Version 7.2
   a) DHMH operations continue although at less than optimal capacity and capability due to lack of essential services, resources and staff.
   b) Pan Flu has impacted several sectors of society with mounting affects which continue.
   c) There are significant numbers of cases throughout Maryland with most cases in densely populated regions. Remote regions of he state appear to be affected to a lesser degrees as a result of greater distances and lower population densities.
   d) The health care system is at the breaking point and at near collapse.
   e) Directive Of The Secretary Of Health And Mental Hygiene For medical equipment and supplies to support healthcare facilities.
   f) Critical Infra-structure continues to experience failures. Several critical-infra-structure and key resources within Maryland have been affected. Service industries have been hardest hit due to high absenteeism. Producers are unable to keep up with demand.
   g) Maryland has been unable to either support or receive help from neighboring states.

SITUATIONAL ANALYSIS AND ASSESSMENT

Assessment and Planning: ***US Pandemic Week:8***

DHMH recommendations:

1) The pandemic continues with impact throughout all sectors of society. The result in failing societal integrity, harmony and well being.
2) Projected impact of cases is presented in the assessment below. Projections suggest that the peak of the wave may have been passed. However, admissions to limited healthcare facilities continues as do deaths.
3) Continue the recommendation made in previous sit reps, public health directives and public messaging.
   a) Recovering employees who can return to work should be in positions where they can interact with the public.

EXECUTIVE ACTION

Federal Declarations:

Date/Time, Title, Summary

April 25, 2008: *US Stage has been elevated to US Stage 2:* Confirmed Outbreak overseas. This parallels the *WHO elevation to WHO Phase 4-5:* small to larger localized clusters with limited human to human transmission and poor adaptation to humans. The CDC has issued a Pandemic Alert.

May 19, 2008: The US stage has been at US Stage 3: Widespread outbreaks in multiple overseas locations. However, given the recent epidemiological findings it has been elevated a second time. *The current US Stage is US Stage 4: First human cases in North America and /or the United States.*

June 1, 2008: The president makes a federal disaster declaration giving broad powers to Health and Human Services to combat the pandemic. Only essential federal employees are required to report for work if they are not sick. There is liberal leave and work from home.

State of Emergency:

June 17, 2008: The Governor Declares a State of Emergency.

Date/Time, Title, Summary

Catastrophic Health Care Declaration:

June 11, 2008: The DHMH Secretary has declared a Catastrophic Health Emergency.

Date/Time, Title, Summary

The declaration encompasses the institution of non-pharmaceutical community containment issues including: liberal leave; work from home; voluntary isolation for the sick; quarantine for exposed individuals; restriction of social gatherings and school closures.

Executive Orders:

Date/Time, Title, Summary

Order:

June 14, 2008: DHMH Secretary's Order: Isolation and Quarantine: All individuals who are sick or have been exposed to sick individuals are to remain in their homes.

Order:

8 July 2008: DHMH Secretary of Health ORDER: DHMH Confiscation of Medical Equipment, Supplies and Medications.

The secretary under the catastrophic Health Emergency Act has taken control of all available medical equipment and supplies not already in healthcare facilities.

Order:

Order:

DHMH Command /Coordination Center:

1. DHMH command/coordination center remains functional and continues to coordinate ESF 8: Public Health and Medical aspects of the pandemic.
2. Public Service Messages regarding the use of clean hygiene, cough etiquette and voluntary quarantine have been running in all media.

DHMH Executive Command Center:

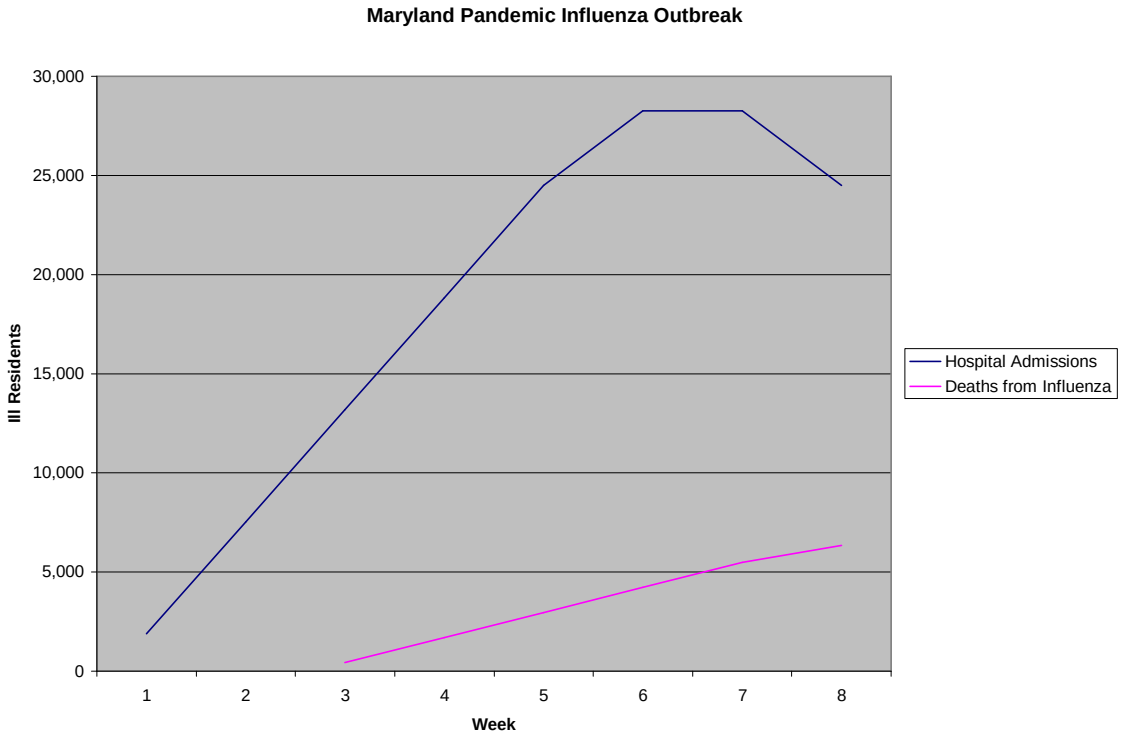
Continues to operate and support DHMH operations and provide the governor and the cabinet with updates and recommendations.

EOC Activation:

List all EOCs Activated by County and function i.e. LHD.

MEMA SEOC continues at full activation status.

Total Casualties: Figure 1: Reported Weekly Hospital Admissions And Hospital Deaths For The First 8 Weeks Of The Pandemic



Projected **12 Week Values Based Upon Current Epidemiological Trends**

Total Symptomatic Cases	1,965,217
Total Deaths	71,335
Total Hospitalizations	238,424
Total Out-Patient Visits And Those Without Care	1,655,458

Weekly Data	15 June 08 Week 4		1 July Week 6		8 Week Cumulative Data	
	Admissions	Deaths	Deaths	Admissions	Admissions	Deaths
Maryland	18,834	1,690	4,225	28,251	146,905	21,127
Allegany	280	28	69	420	2,184	346
Anne Arundel	1,694	150	376	2,540	13,210	1,878
Baltimore	2,818	268	670	4,227	21,982	3,350
Balt City	2,130	193	482	3,195	16,614	2,409
Calvert	284	24	60	426	2,215	302
Caroline	112	10	26	168	872	128
Carroll	566	50	126	849	4,415	628
Cecil	331	29	73	497	2,584	365
Charles	433	36	90	650	3,378	450
Dorchester	117	11	29	176	914	143

HUMAN SERVICES

Frederick	724	63	158	1,086	5,649	788
Garrett	108	10	26	162	844	130
Harford	795	71	177	1,193	6,204	885
Howard	854	72	181	1,281	6,661	903
Kent	78	8	20	117	610	98
Montgomery	3,145	284	711	4,717	24,528	3,556
Prince George	2,625	219	547	3,937	20,472	2,735
Queen Anne's	160	15	37	239	1,244	185
Somerset	95	9	22	142	738	109
St. Mary's	316	27	67	475	2,468	337
Talbot	145	15	38	217	1,128	188
Washington	508	47	119	761	3,959	593
Wicomico	318	29	73	476	2,477	365
Worcester	197	21	51	296	1,540	257

Shelter Operations:

Shelter operations have been curtailed due to lack of staff and resources as well as the higher mortality in the homeless

Give summary of locations

School System: Schools remain closed by order of the DHMH Secretary. Some schools and universities are attempting to provide services to students in quarantine/isolation.

EMERGENCY SERVICES

Health and Medical: See Below for Public Health and Healthcare critical infra-structure.

Law Enforcement: Law Enforcement Capacity and capability are severely impacted by the pandemic. There has been an upsurge in violent crime related to lack of a visible LE presence as well as desperation by residents. Local law enforcement has been burdened with investigating home deaths. A high percentage are related to influenza, however, they have attributed some deaths to homicide and suicide within families.

EMS: EMS 911 dispatch centers continue to triage Pan Flu calls and dispatch EMS only when appropriate. Upon arrival at the residence EMS crews are prioritizing the sick and only transporting those residents with the highest likelihood of survival. Decisions to transport to hospitals or alternative care sites are influenced by capability to provide care at the respective locations.

Fire and Rescue: Suppression and rescue capability is reduced as a result of absenteeism. There have been several fire that have been allowed to burn completely. This is due to lack of water, personnel and effective dispatch capacity.

Search and Rescue: Search and Rescue teams have been activated to investigate the apparent deaths of residents in their homes when neighbor report not seeing them. This is especially important for the elderly. In addition, they are checking up on home bound residents who are machine dependent as well as reported to have chronic medical problems.

INFRASTRUCTURE

Public Health: Public health and medical sector is operating over capacity with system stress related to decreased staff, equipment and supplies. The system is operating in "disaster" level maximizing surge capacity within facilities. Several hospitals have established alternative care sites and triage sites for less than critical patients. Lab services can not keep up with demand.

Critical care resources are especially overwhelmed with critical patients admitted to general medical rooms. Surgical capacity is markedly reduced and only life threatening surgical cases with a high chance of survival are taken to the operating room. There have been several hospital reporting that no doctors have reported in one or two days.

INFRASTRUCTURE

Local health departments have been swamped with calls from the community as well as from long term care facilities. Several local residential and long term care facilities have reported numerous deaths but have been unable to have the corpses picked up. In addition, renal failure patients on dialysis have no been receiving dialysis with severe consequences.

Reports are coming in from the healthcare community and advocacy groups for vulnerable populations that several individuals are unable to obtain care, transport to healthcare providers or replenishment of their medical supplies, equipment or medications.

Local pharmacies are reportedly out of medications to treat chronic medical problems such as hypertension, diabetes, heart failure and respiratory diseases.

Operational mental health services have been inundated with calls for help related to severe depression, suicidal thoughts and exacerbation of chronic medical problems related to decompensation of residents with mental illness.

Law Enforcement has reported finding several children at home without any adult supervision. They children report that either one of both parents have died and there are no immediate relatives.

There are several public health concerns related to food and water safety as well as mental health issues related to fatigue and stress on those workers who can continue to provide essential services. Limited Public Health employees have been severely impacted in trying to keep up with ESF 8 response.

Energy: The energy sector is unable to keep up with demand. Operations and delivery of services have been affected by staff/employee absenteeism resulting not only in the reduction of services but also maintenance of equipment. Coal and gas fired generation units have shut down due to the lack of energy sources having exhausted their existing 6 week supply of coal and the lack of operating pipelines. Nuclear production continues at peak operations however, the stress on available staff is taking it's toll and resulting in mistakes. . Rolling black outs have replaced the brown outs.

Transportation: The governor has taken control of all transportation and shipping in Maryland. The transportation sector has been tasked with the transport of essential goods and products such sa medical supplies and food. Public transportation continues to operate in very limited capacity. Major shipping companies are marginal at best.

Banking and Finance: Banking failures have continued especially for small local community and regional banks and financial institutions. The economic impact has been felt on a worldwide basis.

Utilities/Water/Sewer: Water and sewage treatment have been severely impacted by the loss of chemicals and staff. This ahs caused public health concerns. Several water main breaks have not been repaired. In addition, the lack of dependable water for use in water chillers for HVAC operations has caused several businesses and critical infra-structure to fail and or close.

IT/Telecommunications: IT and Telecommunications have been stressed by the increased utilization by residents who are at home. The IT/Telecommunications companies have continued preferential service to those essential critical infra-structure sectors. There have been reported spot outages of all communications platforms except amateur radio.

Food/Agriculture: Food remains a major public health threat and issue. There are major problems with food stores and difficulties in food delivery and distribution

Postal/Shipping: Due to high absenteeism postal operations have been curtailed.

Government: Government operations can not keep up with the demand to support to critical essential and fundamental services. Employees have are refusing to report for work.

Other:

LOGISTICS

Volunteer Support: There have been several requests for volunteer services especially for the medical community. Currently the professional boards are reviewing credentials. Under consideration is a request to activate the Maryland Professional Volunteer Corps and Medical Reserve Corps. The faith based communities have had limited success in providing neighborhood support.

Military Support: DOD has mobilized resources for continued support of essential operations in the public sector.

LOGISTICS

National guard units continue to be active in several areas of Maryland. Operations continue with reduced forces.

Resource Distribution: None

Air Operations: None

Auxiliary Power Sporadically operating but limited due to fuel availability issues.

Warehouse/Staging Activity: Maryland SNS/RSS site has closed due to the lack of available supplies and equipment to distribute to healthcare facilities. As well as the lack of personnel and transportation means.

Donations Management: None

REGIONAL ACTIVITIES

Western Region: All counties in the region are operating at maximum capacity with limited resources that are available. Several report lack of food and water to maintain staff during operational periods..

Capital Region: All counties in the region are operating at maximum capacity with limited resources that are available. Several report lack of food and water to maintain staff during operational periods.

Southern Region: All counties in the region are operating at maximum capacity with limited resources that are available. Several report lack of food and water to maintain staff during operational periods.

Central Region: All counties in the region are operating at maximum capacity with limited resources that are available. Several report lack of food and water to maintain staff during operational periods.

Eastern Region: All counties in the region are operating at maximum capacity with limited resources that are available. Several report lack of food and water to maintain staff during operational periods.

WEATHER

Forecast: Warm and hot weather as expected for the season. High temperatures have added to the public health concerns related to code red heat advisories.

Incident Intelligence

Source, Date/Time and Summary

Limited availability of open source Intel given limited News capabilities.

Report or Summary: Governor's directive to take over the transportation industry.

Report or Summary: **DHMH Secretary of Health ORDER: DHMH Confiscation of Medical Equipment, Supplies and Medications.**

WHEREAS, I, John M. Colmers, Secretary of Health and Mental Hygiene of the State of Maryland, in response to the recent diagnoses of human cases of novel influenza A virus infection, recognize that it is of the utmost necessity to provide immediate health care to infected individuals and to prevent further exposure of individuals to the disease; and

WHEREAS, In order to provide this health care and prevent further exposure of individuals to this disease, it is crucial that healthcare providers, including healthcare facilities, cooperate with the Department of Health and Mental Hygiene ("DHMH").

NOW, THEREFORE, Pursuant to the authority vested in me by the laws of Maryland, including but not limited to, Maryland Code Annotated, Health-General §§ 2-102, 2-104, 2-105, 2-108, 4-305(b) (3), 18-101, 18-102, 18-103, 18-201, 18-202, 18-205, and 18-208, 18-901, 18-902, 18-904, 18-905 and Code of Maryland Regulations (COMAR) 10.06.01.03, .04, and .06, I HEREBY ORDER that all medical supplies and equipment and medications not in the procession of healthcare facilities or individuals who are dependent upon such devices, equipment and medications be turned over to DHMH and local health departments / local health officer in the jurisdiction in which the medical supplies, equipment and medications are located for immediate use in the treatment of sick residents..

Incident Intelligence

Source, Date/Time and Summary

Report or Summary:
Report or Summary:
Report or Summary:

(Back)

(Back)

Event Title: 2008 Influenza Pandemic

Event Start date: March 15, 2008
Report date and Time: 7 August, 2008: 12 pm
Report Number: #8
Report Created By: DHMH/ OP&R
Contact Information: OP&R
Phone: **DHMH Call Center: 866.829.5240; Fax: 410.225.0378** (OP&R Office 410.767.0823)
Email: Prepared@dhmh.state.md.us

SITUATIONAL SUMMARY

Situation Summary From Start:

1) *March 2008:* The international community and national health agencies have initiated the investigation of patients presenting with Influenza like Illness (ILI) in overseas locations in the mid and far east. These influenza cases are suspected to be caused by a novel flu virus.
2) *April 2008:* WHO and the US have both elevated their pandemic influenza ratings. There have been clusters of out breaks in overseas countries predominately in Asia. However, suspected cases were identified in European countries as well as several US ports of entry. The virus has been identified as a novel Type A H7 N3 virus.
    a) The *WHO Suspected Case definition* is as follows:
        i) Fever: equal to or greater than 100.4 F/ 38.2 C;
        ii) Severe productive cough occasionally bloody;
        iii) Exposure: Residence or travel to any region with a case of the novel strain.
3) *May 19, 2008:* ***Week 1 of the US pandemic Wave***, WHO has declared a pandemic and WHO Phase 6 and US Stage 4. Epidemiological investigation has demonstrated a35% attack rate and 30% mortality rate. The first cases have been confirmed in the United States. Maryland has only suspected cases.
4) *June 15, 2008:* ***US Pandemic Week 4:*** WHO Phase 6 and US Stage 5. Pan Flu has spread worldwide with severe impact on third world countries with resulting social unrest resulting from scarce resources of medical care, food and water as well as wide spread death. CDC recommended activation of pan flu plans with enforcement of non-pharmaceutical containment interventions. SNS/VMI has been pre-deployed by CDC. National Guard has been activated in several states. Maryland reports clusters of disease statewide with ED over-crowding. Anti-viral medications have been distributed to essential employees of critical infra-structure with instructions that they are to only be taken when sick.
5) *July 1 2008:* ***US Pandemic Week 6:*** WHO Phase 6 and US Stage 5. The pandemic continues throughout the world, the United States and Maryland. There is severe disruption in all critical infra-structure and key resource sectors. The worldwide situation has worsened as it has in the US and Maryland. Pan flu has impacted all age groups and segments of society. The number of Maryland cases regionally varies but is considered widespread. Resources of all types are in short supply related to absent employees, inability to obtain materials and supplies resulting in decreased production and provision of services. In addition there are threats to critical infra-structure as a result of physical plant deterioration. ***(note: at this time due to staffing and resource issues Sit Rep #6 is unavailable for publication).***
6) *24 July 2008:* **US Pandemic Week 8**: The pandemic continues to have severe consequences worldwide and within the US and Maryland. Several critical-infra-structures are near failure with the loss of goods and services. The health care system is on the verge of collapse with the wide spread impact of failure of the health care system. Cumulative hospital admission are 146,000 with q reported 21,000 deaths.

Situation Update / Summary Since Last Report:

US Pandemic Week 10

1) International:
    a) *WHO Phase 6: Sustained Human to human transmission of the virus.*
    b) IT is impossible to determine the number of death and economic impact of the pandemic as well as to project the recovery.
    c) Monitoring of pan flu at the initial countries of origin has demonstrated reduced numbers of

new cases.

d) A vaccine has been develop but the efficacy has not been determined. It is currently in production.

2) United States:

a) *US Stage has been elevated to US Stage 5*: Spread through out the United States.

b) The federal government has continued to focus response efforts on the healthcare system, national economy as well as Tier 1 critical Infra-structure.

c) HHS is considering regulatory relieved and suspension for health care providers, Medicare and Medicaid regulations.

3) **Maryland: Maryland Pan Flu Plan: Pages 35-79**
http://bioterrorism.dhmh.state.md.us/flu.htm
DHMH - PanFlu Plan - Version 7.2

a) DHMH operations continue although at less than optimal capacity and capability due to lack of essential services, resources and staff.

b) Pan Flu has impacted several sectors of society with mounting affects which continue.

c) Although there appears to be a reduction in the number of new cases reported, the health care system and critical infra-structure still are stressed and over burdened.

d) Critical Infra-structure continues to experience failures. Several critical-infra-structure and key resources within Maryland have been affected. Service industries have been hardest hit due to high absenteeism. Producers are unable to keep up with demand.

e) The secretary has issued orders for the *Change in Scope of Practice of Health Care Providers and Changes in the Standards of Care.*

SITUATIONAL ANALYSIS AND ASSESSMENT

Assessment and Planning: ***US Pandemic Week:8***

DHMH recommendations:

1) The pandemic continues with impact throughout all sectors of society. The result in failing societal integrity, harmony and well being.

2) Projected impact of cases is presented in the assessment below. Projections suggest that the peak of the wave may have been passed. However, admissions to limited healthcare facilities continue as do deaths.

a) Secretary made new orders which should allow healthcare providers and facilities to better handle the medical surge related to the pandemic.

EXECUTIVE ACTION

Federal Declarations:

Date/Time, Title, Summary

April 25, 2008: US Stage has been elevated to US Stage 2: Confirmed Outbreak overseas. This parallels the *WHO elevation to WHO Phase 4-5:* small to larger localized clusters with limited human to human transmission and poor adaptation to humans. The CDC has issued a Pandemic Alert.

May 19, 2008: The US stage has been at US Stage 3: Widespread outbreaks in multiple overseas locations. However, given the recent epidemiological findings it has been elevated a second time. *The current US Stage is US Stage 4: First human cases in North America and /or the United States.*

June 1, 2008: The president makes a federal disaster declaration giving broad powers to Health and Human Services to combat the pandemic. Only essential federal employees are required to report for work if they are not sick. There is liberal leave and work from home.

1 August, 2008: The President and Secretary of HHS announced the relaxation of Medicaid and Medicare regulations for billing and documentation.

State of Emergency:

Date/Time, Title, Summary

June 17, 2008: The Governor Declares a State of Emergency.

Catastrophic Health Care Declaration:

Date/Time, Title, Summary

June 11, 2008: The DHMH Secretary has declared a Catastrophic Health Emergency.

The declaration encompasses the institution of non-pharmaceutical community containment issues including: liberal leave; work from home; voluntary isolation for the sick; quarantine for exposed individuals; restriction of social gatherings and school closures.

Executive Orders:

Date/Time, Title, Summary

Order:

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Order:

8 July 2008: DHMH Secretary of Health ORDER: DHMH Confiscation of Medical Equipment, Supplies and Medications.

Order:

1 August 2008: DHMH Secretary of Health ORDER: DHMH Orders a Change in Scope of Practice for Health care Providers. In conjunction with the respective professional boards.

Order:

7 August 2008: DHMH Secretary of Health ORDER: DHMH Orders a Change in the Standards of Care to Sufficiency of Care.

DHMH Command /Coordination Center:

1. DHMH command/coordination center remains functional and continues to coordinate ESF 8: Public Health and Medical aspects of the pandemic.
2. Public Service Messages regarding the use of clean hygiene, cough etiquette and voluntary quarantine have been running in all media.

DHMH Executive Command Center:

Continues to operate and support DHMH operations and provide the governor and the cabinet with updates and recommendations.

EXECUTIVE ACTION

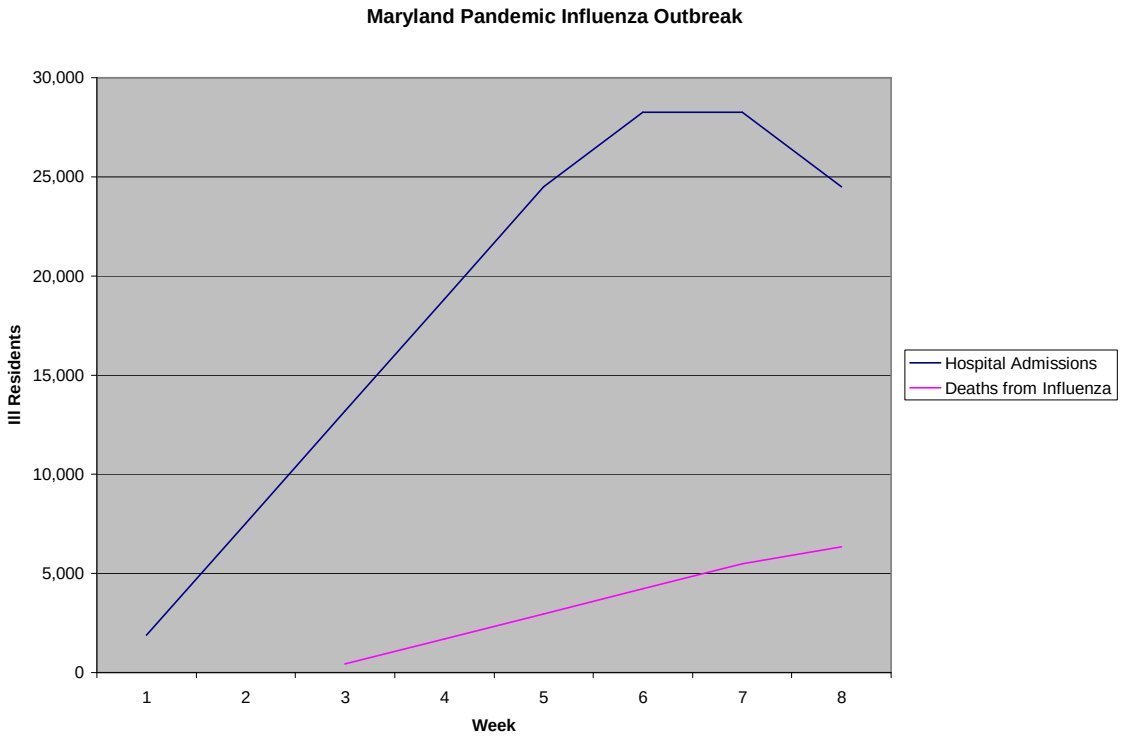
EOC Activation:

MEMA SEOC continues at full activation status.

List all EOCs Activated by County and function i.e. LHD.

HUMAN SERVICES

Total Casualties: Figure 1: Reported Weekly Hospital Admissions And Hospital Deaths For The First 8 Weeks Of The Pandemic



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School System: Schools remain closed by order of the DHMH Secretary. Some schools and universities are attempting to provide services to students in quarantine/isolation.

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Health and Medical: See Below for Public Health and Healthcare critical infra-structure.

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INFRASTRUCTURE

INFRASTRUCTURE

Public Health: *Several hospitals have instituted the recommended change in Scope of Practice and sufficiency of care standards recommended by DHMH.*

Public health and medical sector is operating over capacity with system stress related to decreased staff, equipment and supplies. The system is operating in "disaster" level maximizing surge capacity within facilities. Several hospitals have established alternative care sites and triage sites for less than critical patients. Lab services can not keep up with demand.

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Transportation: The governor has taken control of all transportation and shipping in Maryland. The transportation sector has been tasked with the transport of essential goods and products such sa medical supplies and food. Public transportation continues to operate in very limited capacity. Major shipping companies are marginal at best.

Banking and Finance: Banking failures have continued especially for small local community and regional banks and financial institutions. The economic impact has been felt on a worldwide basis.

Utilities/Water/Sewer: Water and sewage treatment have been severely impacted by the loss of chemicals and staff. This ahs caused public health concerns. Several water main breaks have not been repaired. In addition, the lack of dependable water for use in water chillers for HVAC operations has caused several businesses and critical infra-structure to fail and or close.

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Food/Agriculture: Food remains a major public health threat and issue. There are major problems with food stores and difficulties in food delivery and distribution

INFRASTRUCTURE

Postal/Shipping: Due to high absenteeism postal operations have been curtailed.

Government: Government operations can not keep up with the demand to support to critical essential and fundamental services. Employees have are refusing to report for work.

Other:

LOGISTICS

Volunteer Support: There have been several requests for volunteer services especially for the medical community. Currently the professional boards are reviewing credentials. Under consideration is a request to activate the Maryland Professional Volunteer Corps and Medical Reserve Corps. The faith based communities have had limited success in providing neighborhood support.

Military Support: DOD has mobilized resources for continued support of essential operations in the public sector. National guard units continue to be active in several areas of Maryland. Operations continue with reduced forces.

Resource Distribution: None

Air Operations: None

Auxiliary Power Sporadically operating but limited due to fuel availability issues.

Warehouse/Staging Activity: Maryland SNS/RSS site has closed due to the lack of available supplies and equipment to distribute to healthcare facilities. As well as the lack of personnel and transportation means.

Donations Management: None

REGIONAL ACTIVITIES

Western Region: All counties in the region are operating at maximum capacity with limited resources that are available. Several report lack of food and water to maintain staff during operational periods..

Capital Region: All counties in the region are operating at maximum capacity with limited resources that are available. Several report lack of food and water to maintain staff during operational periods.

Southern Region: All counties in the region are operating at maximum capacity with limited resources that are available. Several report lack of food and water to maintain staff during operational periods.

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WEATHER

Forecast: Warm and hot weather as expected for the season. High temperatures have added to the public health concerns related to code red heat advisories.

Incident Intelligence

Source, Date/Time and Summary

Limited availability of open source Intel given limited News capabilities.

Report or Summary: Governor's directive to take over the transportation industry.

Report or Summary: **1 August 2008: DHMH Secretary of Health ORDER: DHMH Change in the Scope of Practice**

WHEREAS, I, John M. Colmers, Secretary of Health and Mental Hygiene of the State of Maryland, in response to the recent diagnoses of human cases of novel influenza A virus infection, recognize that it is of the utmost necessity to provide immediate health care to infected individuals and to prevent further exposure of individuals to the disease; and

WHEREAS, In order to provide this health care and prevent further exposure of individuals to this disease,

it is crucial that healthcare providers, including healthcare facilities, cooperate with the Department of Health and Mental Hygiene ("DHMH").

NOW, THEREFORE, Pursuant to the authority vested in me by the laws of Maryland, including but not limited to, Maryland Code Annotated, Health-General §§ 2-102, 2-104, 2-105, 2-108, 4-305(b) (3), 18-101, 18-102, 18-103, 18-201, 18-202, 18-205, and 18-208, 18-901, 18-902, 18-904, 18-905 and Code of Maryland Regulations (COMAR) 10.06.01.03, .04, and .06, I HEREBY ORDER that licensed medical providers can expand the scope of care that they provide to patients as recommended by DHMH and the respective Professional Boards. These include:

1. ACLS certified RNs intubate patients if no physician is immediately available;

2. RNs dispense medications;

3. RNs assess, treat and discharge low acuity level pts who report to EDs;

4. Nurse Practitioners practice outside their scope by ordering medications they are not licensed to prescribe;

5. MDs perform procedures they are not credentialed to perform – i.e. deep sedation;

6. EMS (EMT and Paramedics) when called to a residence; assess, diagnosis and treat low level acuity pts without transporting them for an MD to evaluate;

7. On medical floors in hospitals can patient care be directed by an LPN instead of an RN.

WHEREAS, the changes in the Scope of Practice are permitted to be employed by health care facilities at their discretion, there must be ongoing oversight and monitoring to identify any adverse outcomes resulting from these changes.

Report or Summary: **7 August 2008: DHMH Secretary of Health ORDER: DHMH Change in the Standard of Care;**

WHEREAS, I, John M. Colmers, Secretary of Health and Mental Hygiene of the State of Maryland, in response to the recent diagnoses of human cases of novel influenza A virus infection, recognize that it is of the utmost necessity to provide immediate health care to infected individuals and to prevent further exposure of individuals to the disease; and

WHEREAS, In order to provide this health care and prevent further exposure of individuals to this disease, it is crucial that healthcare providers, including healthcare facilities, cooperate with the Department of Health and Mental Hygiene ("DHMH").

NOW, THEREFORE, Pursuant to the authority vested in me by the laws of Maryland, including but not limited to, Maryland Code Annotated, Health-General §§ 2-102, 2-104, 2-105, 2-108, 4-305(b) (3), 18-101, 18-102, 18-103, 18-201, 18-202, 18-205, and 18-208, 18-901, 18-902, 18-904, 18-905 and Code of Maryland Regulations (COMAR) 10.06.01.03, .04, and .06, I HEREBY ORDER that the following changes in the standard of care are appropriate for the healthcare system. These include:

1. Abbreviated or no patient documentation is permissible as long as minimum requirements are meet;

2. Ability to ignore policies that specify timed actions for example; VS 15 min after blood admin

Incident Intelligence

Source, Date/Time and Summary

started and then q 30 min, IV dressing changes Q 24 hr;

3. Hospitals are requesting the ability to deviate from standard nurse patient ratios are permitted for example in an ICU 1 RN to 2 patients; they would like to change it to 1 RN to 6 - 8 pts.

4. Hospitals requesting to lift the restrictions around resident work schedules ae permitted.

WHEREAS, the changes from Standard to sufficiency of CARE are permitted to be employed by health care facilities at their discretion, there must be ongoing oversight and monitoring to identify any adverse outcomes resulting from these changes.

Report or Summary:
Report or Summary:

(Back)

(Back)

Event Title: 2008 Influenza Pandemic

Event Start date: March 15, 2008
Report date and Time: 21 August, 2008: 12 pm
Report Number: #9
Report Created By: DHMH/ OP&R
Contact Information: OP&R
Phone: **DHMH Call Center: 866.829.5240; Fax: 410.225.0378** (OP&R Office 410.767.0823)
Email: Prepared@dhmh.state.md.us

SITUATIONAL SUMMARY

Situation Summary From Start:

1) *March 2008:* The international community and national health agencies have initiated the investigation of patients presenting with Influenza like Illness (ILI) in overseas locations in the mid and far east. These influenza cases are suspected to be caused by a novel flu virus.
2) *April 2008:* WHO and the US have both elevated their pandemic influenza ratings. There have been clusters of out breaks in overseas countries predominately in Asia. However, suspected cases were identified in European countries as well as several US ports of entry. The virus has been identified as a novel Type A H7 N3 virus.
    a) The *WHO Suspected Case definition* is as follows:
        i) Fever: equal to or greater than 100.4 F/ 38.2 C;
        ii) Severe productive cough occasionally bloody;
        iii) Exposure: Residence or travel to any region with a case of the novel strain.
3) *May 19, 2008:* ***Week 1 of the US pandemic Wave***, WHO has declared a pandemic and WHO Phase 6 and US Stage 4. Epidemiological investigation has demonstrated a35% attack rate and 30% mortality rate. The first cases have been confirmed in the United States. Maryland has only suspected cases.
4) *June 15, 2008:* ***US Pandemic Week 4:*** WHO Phase 6 and US Stage 5. Pan Flu has spread worldwide with severe impact on third world countries with resulting social unrest resulting from scarce resources of medical care, food and water as well as wide spread death. CDC recommended activation of pan flu plans with enforcement of non-pharmaceutical containment interventions. SNS/VMI has been pre-deployed by CDC. National Guard has been activated in several states. Maryland reports clusters of disease statewide with ED over-crowding. Anti-viral medications have been distributed to essential employees of critical infra-structure with instructions that they are to only be taken when sick.
5) *July 1 2008:* ***US Pandemic Week 6:*** WHO Phase 6 and US Stage 5. The pandemic continues throughout the world, the United States and Maryland. There is severe disruption in all critical infra-structure and key resource sectors. The worldwide situation has worsened as it has in the US and Maryland. Pan flu has impacted all age groups and segments of society. The number of Maryland cases regionally varies but is considered widespread. Resources of all types are in short supply related to absent employees, inability to obtain materials and supplies resulting in decreased production and provision of services. In addition there are threats to critical infra-structure as a result of physical plant deterioration. ***(note: at this time due to staffing and resource issues Sit Rep #6 is unavailable for publication).***
6) *24 July 2008:* **US Pandemic Week 8**: The pandemic continues to have severe consequences worldwide and within the US and Maryland. Several critical-infra-structures are near failure with the loss of goods and services. The health care system is on the verge of collapse with the wide spread impact of failure of the health care system. Cumulative hospital admission are 146,000 with q reported 21,000 deaths.
7) *7August 2008*: **Pandemic Week 10**: The pandemic continues with impact throughout all sectors of society. The result in failing societal integrity, harmony and well being. Projections suggest that the peak of the wave may have been passed. However, admissions to limited healthcare facilities continue as do deaths. Secretary made new orders which should allow healthcare providers and facilities to better handle the medical surge related to the pandemic

SITUATIONAL SUMMARY

Situation Update / Summary Since Last Report:

US Pandemic Week 12

1) International:

a) *WHO Phase 6: Sustained Human to human transmission of the virus.*

b) A vaccine has been developed and has demonstrated acceptable effectiveness and is currently in production.

2) United States:

a) *US Stage has been elevated to US Stage 5*: Spread through out the United States.

b) The US has fast tracked approval of the new vaccine and production in the US has started.

c) The CDC has requested that all health departments and healthcare facilities who are planning to conduct vaccinations use the CDC Countermeasure Response Administration program to identify and track adverse reactions to the vaccine.

d) The federal government is assessing the impact of the pandemic.

e) HHS and the CDC are developing recommendations for personal and community preparedness as well as healthcare system preparedness for the expected second pandemic wave.

3) **Maryland: Maryland Pan Flu Plan: Pages 35-79**
http://bioterrorism.dhmh.state.md.us/flu.htm
DHMH - PanFlu Plan - Version 7.2

a) DHMH operations continue although at less than optimal capacity and capability due to lack of essential services, resources and staff.

b) The fist wave of the pandemic appears to be nearing an end in Maryland although some residual clusters of illness remain.

c) Critical Infra-structure continues to experience failures. The direct and indirect impact of the pandemic is enormous. Several industry advocates are requesting regulatory and statuary forgiveness and relaxation.

d) The healthcare system remains at disaster levels. It is expected to continue at these levels for at least the next 12 weeks as some residual cases are presenting at facilities but the patients currently admitted are requiring hospital stays of 2 weeks.

SITUATIONAL ANALYSIS AND ASSESSMENT

Assessment and Planning:

US Pandemic Week:12

DHMH recommendations:

1) The pandemic appears to have burned out worldwide with decreasing number of cases.
2) Maryland Epidemiological data proves that the "first" wave has passed and we are now entering a recovery period. However, epidemiological surveillance activities will continue since historically there are multiple pandemic waves that can occur.
3) Maryland recovery will be prolonged in all sectors especially the healthcare system.
4) The DHMH Secretary is conferring with Joint Commission on the expected compliance issues related to the Joint Commission and also compliance with state regulations.

EXECUTIVE ACTION

Federal Declarations:

Date/Time, Title, Summary

April 25, 2008: *US Stage has been elevated to US Stage 2:* Confirmed Outbreak overseas. This parallels the *WHO elevation to WHO Phase 4-5:* small to larger localized clusters with limited human to human transmission and poor adaptation to humans. The CDC has issued a Pandemic Alert.

May 19, 2008: The US stage has been at US Stage 3: Widespread outbreaks in multiple overseas locations. However, given the recent epidemiological findings it has been elevated a second time. *The current US Stage is US Stage 4: First human cases in North America and /or the United States.*

June 1, 2008: The president makes a federal disaster declaration giving broad powers to Health and Human Services to combat the pandemic. Only essential federal employees are required to report for work if they are not sick. There is liberal leave and work from home.

1 August, 2008: The President and Secretary of HHS announced the relaxation of Medicaid and Medicare regulations for billing and documentation.

24 August 2008: The president and CDC Director declare the Pandemic over. The president proposes several recovery programs for individuals as well as businesses.

State of Emergency:

Date/Time, Title, Summary

June 17, 2008: The Governor Declares a State of Emergency.

Catastrophic Health Care Declaration:

Date/Time, Title, Summary

June 11, 2008: The DHMH Secretary has declared a Catastrophic Health Emergency.

The declaration encompasses the institution of non-pharmaceutical community containment issues including: liberal leave; work from home; voluntary isolation for the sick; quarantine for exposed individuals; restriction of social gatherings and school closures.

Executive Orders:

Date/Time, Title, Summary

Order:

June 14, 2008: DHMH Secretary's Order: Isolation and Quarantine: All individuals who are sick or have been exposed to sick individuals are to remain in their homes.

Order:

8 July 2008: DHMH Secretary of Health ORDER: DHMH Confiscation of Medical Equipment, Supplies and Medications.

Order:

1 August 2008: DHMH Secretary of Health ORDER: DHMH Orders a Change in Scope of Practice for Health care Providers. In conjunction with the respective professional boards.

Order:

7 August 2008: DHMH Secretary of Health ORDER: DHMH Orders a Change in the Standards of Care to Sufficiency of Care.

DHMH Command /Coordination Center:

1. DHMH command/coordination center remains functional and continues to coordinate ESF 8: Public Health and Medical aspects of the pandemic recovery.

EXECUTIVE ACTION

DHMH Executive Command Center: Has ceased operations and is currently assessing the impact of the pandemic on the residents, healthcare programs and developing programs to address identified public health needs within the state.

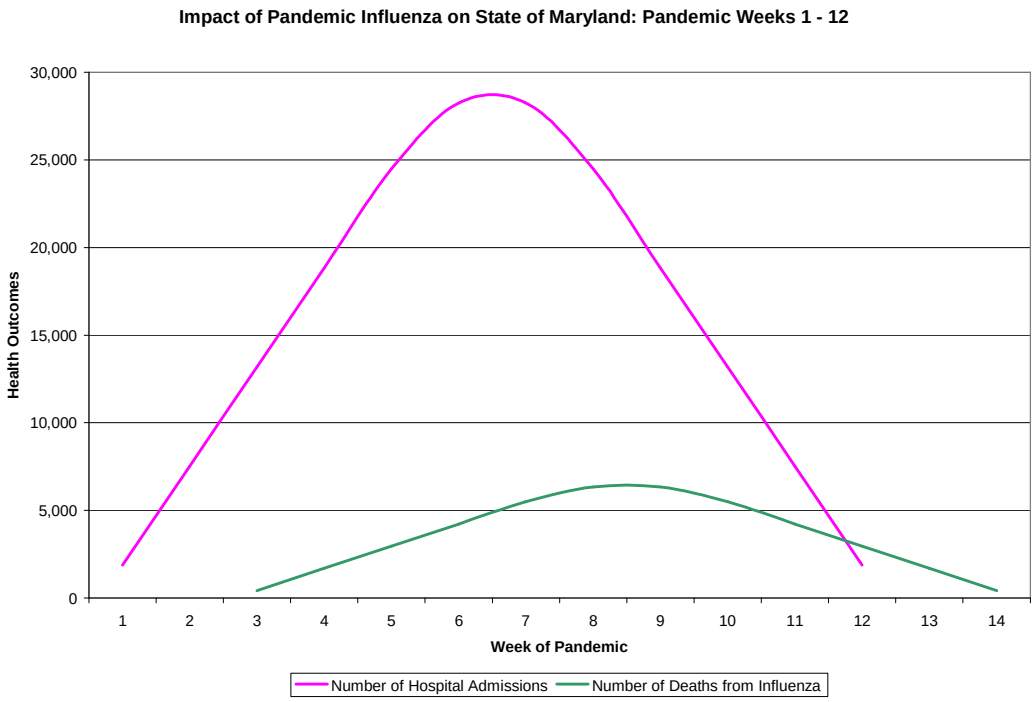
EOC Activation:

List all EOCs Activated by County and function i.e. LHD.

MEMA SEOC is operating at a lower activation level. Current activities are directed towards restoration of essential critical infra-structure services.

HUMAN SERVICES

Total Casualties: Figure 1: Reported Weekly Hospital Admissions And Hospital Deaths For 12 Weeks Of The Pandemic



Projected **12 Week Values Based Upon Current Epidemiological Trends**

Total Symptomatic Cases	1,965,217
Total Deaths	71,335
Total Hospitalizations	238,424
Total Out-Patient Visits And Those Without Care	1,655,458

Projected Direct *Economic Impact of Lost Salaries* for the Pandemic at the End of Week 12

$1.4 billion over the 12 week period

HUMAN SERVICES

Reported Impact of 12 Week Pandemic Wave					
Jurisdiction	**Population**	**Ill**	**Hospitalizations**	**Deaths**	**Total Work Days Lost**
MARYLAND	**5,614,906**	**1,965,217**	**188,338**	**42,254**	**4,914,919**
Allegany	72,832	25,491	2,800	691	63,335
Anne Arundel	509,300	178,255	16,936	3,756	447,911
Baltimore	787,384	275,584	28,182	6,697	680,588
Baltimore City	631,367	220,978	21,302	4,817	550,785
Calvert	88,893	31,113	2,841	604	78,800
Caroline	32,617	11,416	1,117	256	28,212
Carroll	170,260	59,591	5,662	1,256	149,743
Cecil	99,905	34,967	3,312	734	87,695
Charles	138,822	48,588	4,331	901	123,182
Dorchester	31,631	11,071	1,172	287	27,107
Frederick	223,830	78,341	7,243	1,575	196,568
Garrett	29,859	10,451	1,083	261	25,591
Harford	241,402	84,491	7,954	1,767	210,704
Howard	271,362	94,977	8,541	1,805	239,388
Kent	20,023	7,008	781	196	17,243
Montgomery	932,132	326,246	31,449	7,112	813,162
Prince George'	841,315	294,460	26,249	5,466	746,604
Queen Anne's	46,232	16,181	1,596	367	40,312
Somerset	25,773	9,021	949	219	23,311
St. Mary's	99,151	34,703	3,164	674	87,834
Talbot	36,062	12,622	1,445	376	30,082
Washington	143,748	50,312	5,075	1,186	125,262
Wicomico	91,987	32,195	3,176	731	80,213
Worcester	49,013	17,155	1,974	514	41,180

Shelter Operations:

Shelter operations have been curtailed due to lack of staff and resources as well as the higher mortality in the homeless

Give summary of locations

School System: Schools remain closed by order of the DHMH Secretary. Some schools and universities are attempting to provide services to students in quarantine/isolation.

EMERGENCY SERVICES

Health and Medical: See Below for Public Health and Healthcare critical infra-structure.

Law Enforcement: Law Enforcement Capacity and capability are severely impacted by the pandemic. There has been an upsurge in violent crime related to lack of a visible LE presence as well as desperation by residents. Local law enforcement has been burdened with investigating home deaths. A high percentage are related to influenza, however, they have attributed some deaths to homicide and suicide within families.

EMS: EMS 911 dispatch centers continue to triage dispatch of EMS units. Although ther has been a decrease in call s related directly to Pan Flu ther has been an increase in the number of calls for other medical problems. Early data analysis suggested these are related to the increased morbidity of the flu strain.

Fire and Rescue: Suppression and rescue capability is reduced as a result of absenteeism. There have been several fire that have been allowed to burn completely. This is due to lack of water, personnel and effective dispatch capacity.

Search and Rescue:

INFRASTRUCTURE

Public Health: Public health and medical sector is still operating over capacity with system stress related to decreased staff, equipment and supplies. Several areas are recovering and returning to "normal" operations. Recovery of the healthcare system will take a prolonged period. Several systems are recording bankruptcy since they were ordered to remain open during the pandemic. DHMH is working to prevent loss of healthcare systems and the subsequent impact that will have on healthcare in Maryland.

There are numerous public health concerns related to mental health, delivery of essential services such as the WIC program, food and water safety as well as mental health issues. DHMH is developing

Energy: The energy sector is unable to keep up with demand. Operations and delivery of services have been affected by staff/employee absenteeism resulting not only in the reduction of services but also maintenance of equipment. Coal and gas fired generation units have shut down due to the lack of energy sources having exhausted their existing 6 week supply of coal and the lack of operating pipelines. Nuclear production continues at peak operations however, the stress on available staff is taking it's toll and resulting in mistakes. . Rolling black outs have replaced the brown outs.

Transportation: The governor has taken control of all transportation and shipping in Maryland. The transportation sector has been tasked with the transport of essential goods and products such sa medical supplies and food. Public transportation continues to operate in very limited capacity. Major shipping companies are marginal at best.

Banking and Finance: Banking failures have continued especially for small local community and regional banks and financial institutions. The economic impact has been felt on a worldwide basis.

Utilities/Water/Sewer: Water and sewage treatment have been severely impacted by the loss of chemicals and staff. This ahs caused public health concerns. Several water main breaks have not been repaired. In addition, the lack of dependable water for use in water chillers for HVAC operations has caused several businesses and critical infra-structure to fail and or close.

IT/Telecommunications: IT and Telecommunications have been stressed by the increased utilization by residents who are at home. The IT/Telecommunications companies have continued preferential service to those essential critical infra-structure sectors. There have been reported spot outages of all communications platforms except amateur radio.

Food/Agriculture: Food remains a major public health threat and issue. There are major problems with food stores and difficulties in food delivery and distribution

Postal/Shipping: Due to high absenteeism postal operations have been curtailed.

Government: Government operations can not keep up with the demand to support to critical essential and fundamental services. Employees have are refusing to report for work.

Other:

LOGISTICS

Volunteer Support: There have been several requests for volunteer services especially for the medical community. Currently the professional boards are reviewing credentials. Under consideration is a request to activate the Maryland Professional Volunteer Corps and Medical Reserve Corps. The faith based communities have had limited success in providing neighborhood support.

Military Support: DOD has mobilized resources for continued support of essential operations in the public sector. National guard units continue to be active in several areas of Maryland. Operations continue with reduced forces.

Resource Distribution: None

Air Operations: None

Auxiliary Power

Warehouse/Staging Activity: None

Donations Management: None

REGIONAL ACTIVITIES

Western Region: All counties in the region are operating at maximum capacity with limited resources that are available.

REGIONAL ACTIVITIES

Several report lack of food and water to maintain staff during operational periods..

Capital Region: All counties in the region are operating at maximum capacity with limited resources that are available. Several report lack of food and water to maintain staff during operational periods.

Southern Region: All counties in the region are operating at maximum capacity with limited resources that are available. Several report lack of food and water to maintain staff during operational periods.

Central Region: All counties in the region are operating at maximum capacity with limited resources that are available. Several report lack of food and water to maintain staff during operational periods.

Eastern Region: All counties in the region are operating at maximum capacity with limited resources that are available. Several report lack of food and water to maintain staff during operational periods.

WEATHER

Forecast: Cooler weather is expected.

Incident Intelligence

Source, Date/Time and Summary

Report or Summary:

Report or Summary:

Report or Summary:

Report or Summary:

Report or Summary:

(Back)

(Back)

Event Title: 2008 Influenza Pandemic

Event Start date: March 15, 2008
Report date and Time: 5 September, 2008: 12 pm
Report Number: #10
Report Created By: DHMH/ OP&R
Contact Information: OP&R
Phone: **DHMH Call Center: 866.829.5240; Fax: 410.225.0378** (OP&R Office 410.767.0823)
Email: Prepared@dhmh.state.md.us

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Situation Summary From Start:

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8) *21 August 2008* **Pandemic Week 12**: The pandemic appears to have burned out worldwide. Epidemiological data in the US and Maryland supports the finding that the wave is over. There are minimal cases being reports. The process of recovery is starting in the international community, the US and Maryland. The full impact will be difficult to determine and it is projected recovery will take months. There is still pan flu monitoring occurring because of the fear of a second wave. The exact location of where it will start is difficult to determine.

SITUATIONAL SUMMARY

Situation Update / Summary Since Last Report:

US Pandemic Week 15

1) International:

a) *WHO decreased the WHO Phase to 4: small isolated clusters..*
b) WHO is conducting an assessment of the worldwide impact.
c) Aggressive vaccination programs are planned worldwide especially third world countries which have been hardest hit with the greatest impact on all sectors of society.
d) WHO is mobilizing international relief efforts.
e) WHO has continued its epidemiological activities as there are now outbreak reports of food and water borne illness related to contaminated water and food supplies, uncared for decaying bodies and other poor sanitation issues.
f)

2) United States:

a) *US Stage has been elevated to US Stage6*: Recovery
b) The federal government is continuing to assess the impact of the pandemic.
c) Federal government is assessing the response as well as determining resource needs and availability across all sectors of society.
d) Several funding bills are under consideration to stimulate the economy as well as to support individuals who have been most severely affected.
e) Limited vaccination programs have been started.
f)

3) **Maryland: Maryland Pan Flu Plan: Pages 35-79**
http://bioterrorism.dhmh.state.md.us/flu.htm
DHMH - PanFlu Plan - Version 7.2

a) The fist wave of the pandemic appears to be nearing an end in Maryland although some residual clusters of illness remain.
b) The stae is conducting response assessments and resource needs.
c) Critical Infra-structure is returning to normal operation but this varies by sector.
d) DHMH is continuing to monitor for ILI and has noted an increase. This may represent an early second wave or emergence of a new virus. Preliminary tests show that this is a Type B virus. Historical analysis from previous Pandemics and epidemics have demonstrated a rise in Type B cases afterwards.
e) The healthcare system is slowly returning to normal.
f) DHMH is assessing the response and resource needs of the healthcare system to facilitate it's return to normal operations as soon as possible.

SITUATIONAL ANALYSIS AND ASSESSMENT

Assessment and Planning:

US Week15 since the start of the pandemic in the US.

DHMH recommendations:

1) The pandemic is resolving and recovery efforts are under way in the International, National, state and local levels.
2) The common activities appear to return to normal operations, assessment response efforts, determining resource availability and needs.
3) Monitoring for emerging public health issues is continuing especially related to food, water and sanitation related illnesses.

EXECUTIVE ACTION

Federal Declarations:

Date/Time, Title, Summary

April 25, 2008: US Stage has been elevated to US Stage 2: Confirmed Outbreak overseas. This parallels the *WHO elevation to WHO Phase 4-5:* small to larger localized clusters with limited human to human transmission and poor adaptation to humans. The CDC has issued a Pandemic Alert.

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1 August, 2008: The President and Secretary of HHS announced the relaxation of Medicaid and Medicare regulations for billing and documentation.

24 August 2008: The president and CDC Director declare the Pandemic over. The president proposes several recovery programs for individuals as well as businesses.

1 September 2008: The President has lifted the Declaration of Emergency related to the pandemic.

State of Emergency:

June 17, 2008: The Governor Declares a State of Emergency.

Date/Time, Title, Summary

Catastrophic Health Care Declaration:

June 11, 2008: The DHMH Secretary has declared a Catastrophic Health Emergency.

Date/Time, Title, Summary

The declaration encompasses the institution of non-pharmaceutical community containment issues including: liberal leave; work from home; voluntary isolation for the sick; quarantine for exposed individuals; restriction of social gatherings and school closures.

The Governor and DHMH Secretary have allowed their respective declarations expire and were not renewed

Executive Orders:

Date/Time, Title, Summary

Order

Order requiring reporting of Influenza Like Illness **This has been renewed**

Order:

June 14, 2008: DHMH Secretary's Order: Isolation and Quarantine: All individuals who are sick or have been exposed to sick individuals are to remain in their homes. **Expired/Not Renewed**

Order:

8 July 2008: DHMH Secretary of Health ORDER: DHMH Confiscation of Medical Equipment, Supplies and Medications. **Expired/Not Renewed**

Order:

1 August 2008: DHMH Secretary of Health ORDER: DHMH Orders a Change in Scope of Practice for

EXECUTIVE ACTION

Health care Providers. In conjunction with the respective professional boards. **Expired/Not Renewed**

Order: *7 August 2008:* DHMH Secretary of Health ORDER: DHMH Orders a Change in the Standards of Care to Sufficiency of Care. **Expired/Not Renewed**

DHMH Command /Coordination Center:

1. DHMH command/coordination center is preparing to stand down. Epi for public health illnesses related to impacted infra-structure, etc. activities will be conducted within EDCP and OP&R.

DHMH Executive Command Center: Has ceased operations. Senior DHMH Executives are currently assessing the impact of the pandemic on the residents, healthcare programs and developing programs to address identified public health needs within the state.

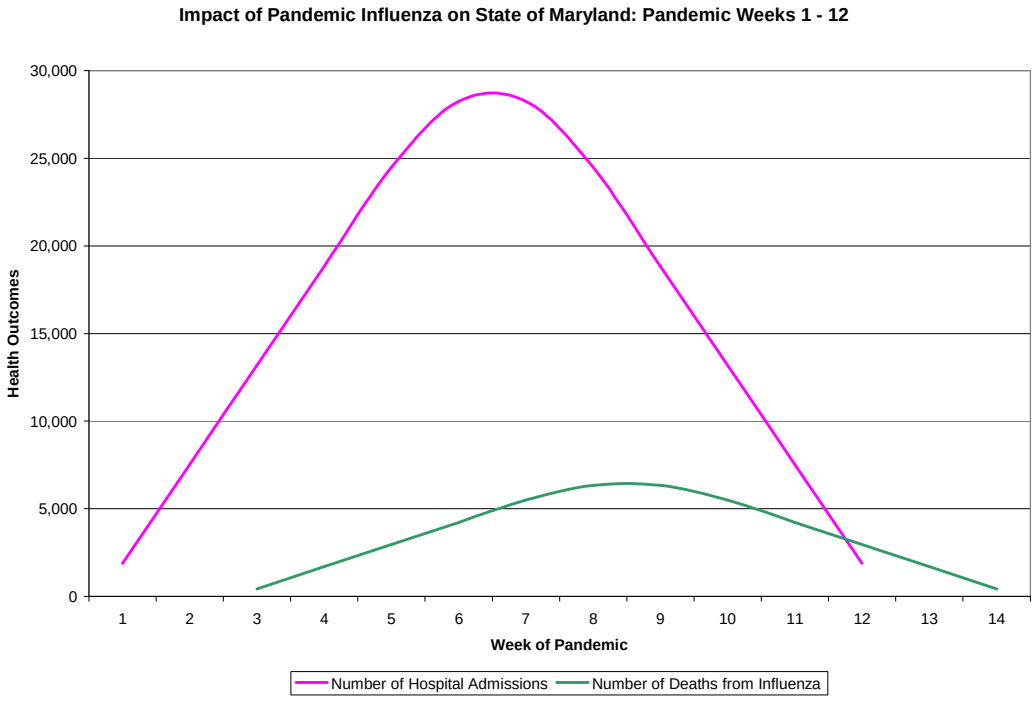
EOC Activation:

List all EOCs Activated by County and function i.e. LHD.

MEMA SEOC is operating at a lower activation level of 2 and expected to go to Level 1 shortly. Current activities are directed towards restoration of essential critical infra-structure services.

HUMAN SERVICES

Total Casualties: Figure 1: Reported Weekly Hospital Admissions And Hospital Deaths For 12 Weeks Of The Pandemic



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Projected Direct *Economic Impact of Lost Salaries* for the Pandemic at the End of Week 12

$1.2 billion over the 12 week period

Projected Economic Cost for Burials: $ 420.0 Million

Reported Impact of 12 Week Pandemic Wave					
Jurisdiction	**Population**	**Ill**	**Hospitalizations**	**Deaths**	**Total Work Days Lost**
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Baltimore	787,384	275,584	28,182	6,697	680,588
Baltimore City	631,367	220,978	21,302	4,817	550,785
Calvert	88,893	31,113	2,841	604	78,800
Caroline	32,617	11,416	1,117	256	28,212
Carroll	170,260	59,591	5,662	1,256	149,743
Cecil	99,905	34,967	3,312	734	87,695
Charles	138,822	48,588	4,331	901	123,182
Dorchester	31,631	11,071	1,172	287	27,107
Frederick	223,830	78,341	7,243	1,575	196,568
Garrett	29,859	10,451	1,083	261	25,591
Harford	241,402	84,491	7,954	1,767	210,704
Howard	271,362	94,977	8,541	1,805	239,388
Kent	20,023	7,008	781	196	17,243
Montgomery	932,132	326,246	31,449	7,112	813,162
Prince George'	841,315	294,460	26,249	5,466	746,604
Queen Anne's	46,232	16,181	1,596	367	40,312
Somerset	25,773	9,021	949	219	23,311
St. Mary's	99,151	34,703	3,164	674	87,834
Talbot	36,062	12,622	1,445	376	30,082
Washington	143,748	50,312	5,075	1,186	125,262
Wicomico	91,987	32,195	3,176	731	80,213
Worcester	49,013	17,155	1,974	514	41,180

Shelter Operations:

None are open

Give summary of locations

School System: Schools are opening and assessing staffing and student needs for the upcoming school year. In addition, they are preparing an assessment of the educational impact on students and how to satisfy state educational requirements.

EMERGENCY SERVICES

Health and Medical:	See Below for Public Health and Healthcare critical infra-structure.
Law Enforcement:	Law Enforcement Capacity and capability are returning to normal with resumption of "normal" law enforcement activities..
EMS:	EMS 911 dispatch centers returned to normal call triage and EMS providers are no longer conducting on site assessments of flu patients to determine appropriateness of transport..
Fire and Rescue:	Suppression and rescue capability is returning to normal..
Search and Rescue:	

INFRASTRUCTURE

Public Health:	Public health and medical sector is determining current capacity and capabilities. Once resource needs are identified they will work with DHMH to return to normal operations as fast as possible.
Energy:	Off line power plants are starting back up. Gas, coal and nuclear plants are undergoing maintenance review. Several nuclear plants will shut down for scheduled maintenance which was postponed during the pandemic.
Transportation:	Commercial and public transportation has returned to limited operations.
Banking and Finance:	This sector is moving to restart and build up the financial markets to improve cash flow. In addition, retail operations are resuming. Financial institutions in conjunction with federal and state regulators are developing programs, plans and statutory modifications to address personal bankruptcies and home foreclosures related to the pandemic.
Utilities/Water/Sewer:	Services are returning to normal. Damaged and failing infra-structure is being repaired and lines flushed to prevent contaminated water. .
IT/Telecommunications:	IT and Telecommunications have been stressed by the increased utilization by residents who are at home. The IT/Telecommunications companies have continued preferential service to those essential critical infra-structure sectors. There have been reported spot outages of all communications platforms except amateur radio.
Food/Agriculture:	Food and agriculture remain a significant problem related to just in time delivery from outside Maryland and the US as well as the limited diversity in the agricultural industry in Maryland. Several crops have not been planted nor harvested on the eastern shore.
Postal/Shipping:	Resuming operations
Government:	Government operations at all levels are returning to normal with resumption of service programs for residents..
Other:	

LOGISTICS

Volunteer Support:	Limited formal volunteer activities are occurring. Community volunteer organizations such as the faith based community have increased outreach to their community neighbors in need..
Military Support:	Activated military/National guard units are undergoing demobilization.
Resource Distribution:	None
Air Operations:	Resuming
Auxiliary Power	none
Warehouse/Staging Activity:	None
Donations Management:	None

REGIONAL ACTIVITIES

Western Region:	All local EOCs and agencies are returning to normal operations and assessing the impact of the pandemic as well as determining resources needs and availability
Capital Region:	
Southern Region:	
Central Region:	

REGIONAL ACTIVITIES

Eastern Region:

WEATHER

Forecast: ***It is a bright and sunny day.***

Incident Intelligence

Source, Date/Time and Summary

Report or Summary: Open source Intel summaries have not been added//submitted at this time.

Report or Summary:

Report or Summary:
Report or Summary:
Report or Summary:

(Back)

Appendix B: Survey Monkey Results of Exercise Participants:

As part of HSEEP requirements all predicating organizations were asked to complete a survey to assess the effectiveness of the exercise. Although the number of respondents is not 100% it is believed that those who responded to the request for feedback related to the Maryland 2008 Statewide Pan Flu exercise accurately reflect the experience of all participants.

Survey Monkey Results

Maryland Pan-Flu Exercise 2008

1. Please enter your name AND the agency or office that you represent.

	Response Count
	128
answered question	128
skipped question	0

2. Which exercise did you participate in?

	Response Percent	Response Count
2.5 day Functional/Full-scale	72.5%	66
School Tabletop on Friday 6/20	35.2%	32
answered question		91
skipped question		37

3. I feel that our plans adequately guided our actions during the exercise.

	Response Percent	Response Count
Strongly agree	34.6%	44
Agree	55.9%	71
Not sure	7.9%	10
Disagree	0.8%	1
Strongly disagree	0.8%	1
answered question		127
skipped question		1

4. Did you discover any needed changes to your plans?

	Response Percent	Response Count
Yes	85.0%	108
No	15.0%	19
If so, please describe briefly.		100
answered question		127
skipped question		1

5. Overall, I feel that the exercise met its stated objectives.

	Response Percent	Response Count
Strongly agree	41.3%	52
Agree	49.2%	62
Not sure	7.1%	9
Disagree	1.6%	2
Strongly disagree	0.8%	1
answered question		126
skipped question		2

6. Overall, the exercise was useful to our agency.

	Response Percent	Response Count
Strongly agree	54.4%	68
Agree	41.6%	52
Not sure	2.4%	3
Disagree	1.6%	2
Strongly disagree	0.0%	0
answered question		125
skipped question		3

7. Overall, the exercise was well run.

	Response Percent	Response Count
Strongly agree	40.0%	50
Agree	51.2%	64
Not sure	6.4%	8
Disagree	1.6%	2
Strongly disagree	0.8%	1
answered question		125
skipped question		3

8. If you have any additional comments, suggestions or observations, please enter them here. Thank you for participating!

	Response Count
	60
answered question	60
skipped question	68

Sampling of Survey Comments:

- Changing roles in the ICS were at times confusing for other staffs that were not aware of who was stepping into the positions.

- Agencies should be allowed to develop their own MSEL rather than using a state level generic MSEL. Agencies wanting to test areas outside the state's identified objectives are forced to fit their drill needs around generic times/dates. It also makes the evaluators' job more difficult.

- The ability to interact with allied agencies and other organizations is always a positive experience. The privilege to practice the planned reactions in the event of an emergency provides a valuable education for knowledge of resources and the capacity of local, state and federal agencies.

- Going into an exercise like this you never know what to expect (like real situations), but I feel it was interesting and informative.

- When conference calls were conducted by DHMH - I suggest the person conducting it should request that all sites calling in place their phones on MUTE -thus allowing the speaker to be heard better.

- Well-planned and run activity. The exercise was most helpful for the participating school systems and other organizations.

- I think the drill was well run. I think my local health department was not well organized

- The drill was realistic. It helped our facility to push the limits and to continue to "think outside the box" as far as emergency preparedness and response is concerned.

- This exercise seemed better put together that the prior exercise. The consultants were more helpful and better informed.

- The tabletop is not the real thing but certainly provided a forum sharing views and ideas. It was well worth the time expended.

- I feel that the MD state information needs to be more clear and representative of the respective geographic areas potentially affected.

- Great, exemplary work! The exercise planners and DHMH staff deserve lots of Kudos.

- EMS Dispatch Call takers felt that the exercise was extremely helpful and recommended that the Modified protocol be taught to all dispatchers.

Appendix C: News Articles Concerning the Exercise:

This section contains representative samples of news items related to the exercise and the participants.

Thursday, June 26, 2008

Pandemic flu drill tests city's readiness

Lessons from 'very important' exercise could be applied to other disasters

Prince George's Gazette
by Elahe Izadi |
Staff Writer

A pandemic flu has hit hundreds of homes in Laurel, forcing families to stay indoors and quarantine themselves.

That was the scenario on June 18 when police officers, city officials and about 85 volunteers participated in the city's pandemic flu drill. The drill, which tested Laurel's ability to respond to such an emergency, was part of statewide drill of responding to a 5- to 12-week-old pandemic flu epidemic.

The group was briefed in the Laurel City Council Chambers before heading out in police cars, armed with electronic devices and bright yellow vests. Their mission was to identify residents with a highly infectious influenza strain and get them the medications they need before the flu spread any more.

The city sent placards to 800 homes in three neighborhoods - Ashford, Laurel Hills and section one of the Villages at Wellington. About 300 homes participated, a larger-than-anticipated turnout, Flemion said.

Residents randomly chose to display placards that either said they were infected or not infected. Infected homes also listed the number of residents and who was sick.

Volunteers in police cars used binoculars to read the information, which they marked down in a Juno, a personal digital assistant. The Internet-capable device instantly transmitted the information to Information Technology professionals back at the emergency center set up at the Laurel Armory, who printed medication labels for infected residents. A point of distribution was then set up for infected residents to pick up medication.

Before, the process of documentation was all done by hand with paper that had to be taken back to the emergency operations center, Flemion said.

‘‘We’re eliminating one step by automating it in the field,” he said.
Sherry Adams, director of the state’s office of Preparedness and Response, said Laurel’s exercise may be the only one of its kind run in the state this year as it used the latest technology and a medication distribution center.

The department will analyze Laurel’s reports in the next 60 days to determine how effective the methods were.

‘‘That’s a very important exercise that they did there that we’re particularly interested in because I think it has a lot of applicability in other areas as well,” she said. ‘‘It may well be replicated around the country.”

She said Laurel’s methodology could be applied in other disaster-response situations. Laurel was not just testing its response to the pandemic flu, Flemion said, but also a new, highly technological emergency response, using GPS and Internet-capable PDAs that can be used in the wake of natural disasters like a tornado.

A number of organizations joined the three-day statewide drill, including 21 health departments, 44 hospitals and 20 state agencies, Adams said. Laurel was one of seven municipalities running the drill, Flemion said.

Many of the 85 volunteers were part of the county and Laurel Community Emergency Response Team, whose members are trained and organize on the neighborhood level in the event of an emergency.

Bowie resident Peter Saderholm, 68, has been a CERT volunteer for six months and said Laurel’s exercise was crucial in evaluating how well the team would handle such a situation.

‘‘Unless you train and practice, and experience the difficulties, you’re never prepared for the real situation,” he said.

Greenbelt CERT volunteer Rena Hull, 66, is a retired nurse who joined the team in 2005. She said a community has to look from within to respond to a crisis.

‘‘The best way to find a helping hand is at the end of your own arm,” she said. ‘‘If our community doesn’t help itself, who will?”

Avian flu drill reveals curable ills in university hospital's protocol

Sara Michael,
The Examiner
2008-06-19 07:00:00.0

BALTIMORE -

At the height of the pandemic flu drill, the phones went dead, and hospital staff had to rely on handwritten notes.

As the University of Maryland Medical Center staff modeled a pandemic avian flu outbreak this week, the radios had a programming glitch, a wireless system in the hospital didn't work outside where the triage tent was set up, and there was no cell- phone signal in a conference room used as an operations hub.

"You don't discover these things until you're running with it," said Leonard Taylor, incident commander for the University of Maryland Medical Center's drill. "This exposes things, and now we have an action item to figure out how to do it better."

Across the state, hospitals, health departments and state health officials tested their ability to respond to a pandemic flu in a comprehensive drill.

"The worry about pandemic flu is that it could be a very virulent form of influenza that could cause a very high mortality rate," said John Colmers, secretary of the Maryland Department of Health and Mental Hygiene.

In the state health department's command center Wednesday, several workers answered phones, coordinating the response and preparing recommendations for state leaders.

The three-day exercise modeled the response to a severe sickness that could emerge overseas. The sickness would take several weeks to spread, peaking in about 12 weeks, when nearly two million people would be sick, Colmers said.

A pandemic flu is defined as a new virus to which people have little immunity and there is no vaccine, according to the Centers for Disease Control and Prevention.

The 1918 flu pandemic killed 50 million people worldwide, and many scientists believe it's only a matter of time until another pandemic strikes.

"It's fair to say it's coming," said Arlene Stephenson, acting deputy secretary for public health at DHMH.

Howard County health officials walked door-to-door Wednesday evening to test the best way to rapidly disseminate medications in an outbreak, the first drill of its kind on the East Coast.

Using campaigning software, health officials have mapped out the most efficient route around the Chateau Ridge Lake neighborhood of Ellicott City. They will be timing the event and comparing it with the method of having residents go to a clinic for medications, said Health Officer Dr. Peter Beilenson.

For state health officials, it's too early to tell the major gaps, but officials are learning what information to have on hand for staff that might be asked to shift roles, Colmers said.

"In the midst of an outbreak," he said, "we don't want to have to think things up on the fly."

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Examiner

Health department plans emergency drills

Exercise to test methods of distribution

Columbia Flier
by Sarah Daniels
Posted 6/18/08

In an effort to test the speed of an emergency response, the Howard County Health Department was slated to execute drills June 18 in North Laurel and Ellicott City.

Staff members planned to distribute food to residents while conducting a statewide pandemic flu exercise, said Lisa de Hernandez, public information officer for the county health department.

In the event of an actual emergency, officials could be faced with the task of rapidly distributing medicines to households.

In the drill, scheduled to be conducted in the Chateau Ridge Lake neighborhood in Ellicott City and the Hammond Elementary and Middle School area of North Laurel, officials planned to test two methods of distribution. In the first method, the "medicine" — in this case the granola bars and fruit — were to be distributed door to door. In the second method, residents were to be asked to visit a centralized distribution point in their neighborhood to collect the "medicine."

This was the first time the door-to-door distribution method was to be used on the East Coast, county health officer Dr. Peter Beilenson said.

Beilenson said such a distribution method could be useful in a number of public health emergencies, such as an outbreak of pandemic flu or following a biological terrorist attack.

Leaflets about the drill were sent out to residents in the testing areas ahead of time, Beilenson said.

State-wide pandemic influenza exercise June 17 and 18

WCBC Radio
Cumberland

The Allegany County Health Department and the University of Maryland School of Nursing (UMDSON) Governor's Wellmobile Western Maryland Region are collaborating with other agencies in the county to participate in a state-wide pandemic influenza exercise June 17 and 18. This pandemic flu exercise will involve federal, state and local agencies. Different regions across the state will be exercising various portions of pandemic flu plans, and our region will focus on alternate care sites. The drill will be conducted in collaboration with the Maryland Department of Health and Mental Hygiene. Local agencies participating in this aspect of the drill are the health department, the UMDSON Governor's Wellmobile Western Maryland Region, Allegany County Sheriff's Office, and Cumberland City Police. Health Department representative Jessica Guthrie…

The drill will be held on June 18 between 8:00am and12:00pm. For more information or questions, please contact the Allegany County Health Department Office of Public Health Preparedness at 301-759-5019.

06/19/2008

Washington County public health workers train for pandemic flu outbreak

Herald Mail
By JOSH SHAW
josh.shaw@herald-mail.com

HAGERSTOWN — Washington County public health staff participated Wednesday in an exercise to test their responsiveness and preparation for a pandemic flu outbreak, something scientists say will occur.

The training session at the Western Maryland Hospital Center was just one of many exercises organized by the Maryland Department of Health and Mental Hygiene and carried out this week, said Rod MacRae, a county health department spokesman.

“Our main purpose is to test planning and response to an outbreak mainly focusing on distribution through our internal staff,” Health Officer Earl Stoner said. “It’s so our internal staff respondents can help the community.”

For the drill, Washington County Health Department employees focused on the distribution of emergency medications to the public.

“We have not historically been involved in training, but in the last five or six years there has been an upswing in the desire for us to respond (to emergencies),” MacRae said.

Should a real flu pandemic occur, staff members would be able to apply their training anywhere in the country, but schools will be the most likely distribution centers, he said.

The drill tests how efficient the response is and what the health department is capable of handling in case of an actual outbreak, Stoner said.

Participants practiced the nonmedical model of distribution, which limits the amount of screening each patient goes through in order to speed up the process.

“Patients” were asked their symptoms, age, height, weight and a few other questions regarding their medical history. Each patient then was given one of two anti-viral medications, directions on when to take the medication and basic information about pandemic flu.

Tamiflu and Relenza, the two drugs offered, are prescription drugs that help prevent the influenza virus and shorten the effects of the virus, but whether they will be effective in fighting a pandemic flu outbreak has yet to be determined, Stoner said.

"A lot of it is based on assumptions that the medications will work," he said. "Some people think it is a waste of time if they are ineffective, but some say it is better than nothing. It is another tool in the toolbox."

A flu pandemic can occur when a new strain of the influenza virus emerges to which people have little or no immunity and for which there is no vaccine available.

The disease spreads quickly, and determining when the next flu pandemic will hit and how severe it will be is extremely difficult, medical experts say.

Influenza pandemics have hit three times in the last 100 years — 1918, 1957 and 1968 — with the first occurrence leaving more than 50 million people dead worldwide.

Flu pandemic scenario tests county's resources

Mock emergency brings 'patients' to AAMC, BWMC

By Shantee Woodards
Staff Writer
Annapolis Capital
Published June 19, 2008

Infected patients were bused to Anne Arundel Medical Center wearing surgical masks with symptoms ranging from coughing to vomiting.

The patients weren't really infected. They were workers from the Anne Arundel County Department of Health who participated, along with workers from other county agencies, in a pandemic flu drill yesterday.

The scenario: About one third of county residents have become ill and medications and vaccines are not available. More than 100 sick or infected "patients" from the Department of Health and Fort George G. Meade participated and were bused to AAMC or Baltimore Washington Medical Center.

This was the first drill of its kind in the county, conducted with multiple agencies. Still, this wasn't the first time the county had to deal with widespread flu. Nearly 100 years ago, several public places in the county were shut down because of the spread of influenza, organizers said.

Antigone Vickery, program manager for emergency preparedness and response, said the exercise was important for health care workers.

"(This scenario) is expecting that we lose 30 percent of the population, so we have to see how we cope in that environment," he said, referring to the portion of the population who would die or be incapacitated because of the illness.

At the Department of Health, workers rolled dice to get their assignments. If they rolled a six or a one, they were assigned to be patients for a day. If they rolled any other number, they were sent to another room to get fitted for a surgical mask. They were required to wear the mask the duration of the drill.

Dr. Joseph Horman and Cristy Sandoval both rolled a one. They were given cards that gave them a short biography of they patients they were supposed to be.

Dr. Horman, the county's public health veterinarian, was assigned the role of a 4-year-old boy named Jeff Jamison. Jeff was crying, but also had vomiting and diarrhea, his card stated.

Ms. Sandoval played the part of Geraldine Graham, a 21-year-old with a cough, vomiting and muscle pain. Ms. Sandoval, an administrative specialist with the Department of Health, speaks Spanish and also was instructed to speak Spanish throughout the drill.

They were bused to the AAMC emergency room, where masked staff members awaited them at the ambulance entrance. Once their symptoms were reviewed, the patients were taken inside on a wheelchair. A portion of the emergency room was devoted to the drill and doubled as the triage area.

"Infected" patients were given beds, chairs and in some cases, stretchers. One man's card said he had to be left to die.

"These kinds of ethical issues are what a lot of places are struggling with now," said Debra Curro, community health nurse for the Department of Health, who helped coordinate the drill. "(But) that is the reality if hospital staff is down."

Interpreter John Van De Kamp was able to translate for Ms. Sandoval, whose pretend character received an IV and blood work.

Dr. Horman had to be taken to pediatrics in a wheelchair, repeatedly saying "I want my mommy," as the staff examined him. He received an IV, oxygen and was able to watch television while he was being monitored. Afterward, he said he thought everything went well, but emphasized it would be different in reality.

"In a real-life situation, there would be a lot happening that people wouldn't be prepared to handle," Dr. Horman said. "There would be so many things happening … the hospital would get very inundated and that would be very difficult."

At BWMC, emergency room workers prepared for about 120 extra people on top of the 250 people they see on an average day. Hospital officials said it took 27 minutes to clear the waiting room and add 100 stretchers to accommodate the influx of new patients.

"This is just testing how we process large number of patients in a small amount of time," said Dr. Larry Linder, senior vice president and the hospital's chief medical officer.

Outside the hospital were two tents: one for medical care and another for a waiting room. The drill turned the participants into actors. Each received a card listing a name, age and complaint along with heart rate, respiration rate, blood pressure and temperature.

Karli George, who registers patients at the hospital, said the day was "good, but a little bit crazy."

"The best part was just seeing the people and the way they are acting is funny," said Ms. George.

A major outbreak of the flu hit the county in the fall of 1918. The Naval Academy, Fort Meade and St. John's College were quarantined in September. By October, movie theaters and schools were closed, according to archives from The Maryland Gazette and The Evening Capital.

Health officials estimated there were 2,068 cases of influenza with 857 deaths in the county, including 700 deaths at Fort Meade.

This was AAMC's first time doing a drill with so many different agencies. Separately, the staff constantly undergoes training for similar scenarios, said Douglas Abel, incident commander.

"It's why we run the drills," Mr. Abel said. "We don't want to try to figure things out when this is occurring. We push ourselves to work through scenarios that could happen to us."

Reporter Sean Norris contributed to this story.

Pandemic flu exercise tests

Area agencies, installation coordinate response

FT. MEADE'S 6-27-08 NEWSPAPER

By Melanie Casey
Acting Editor

More than 30 service members from Fort Meade came down with the pandemic flu on June 18.

They were whisked to the Baltimore Washington Medical Center in Glen Burnie, where nurses and doctors on staff assessed their heart rate, respiration rate, blood pressure and temperature, and triaged them accordingly.

The service members were actually part of a contingent of volunteers from around the community who played the part of flu victims to help assess the county's ability to respond to a pandemic flu outbreak. The scenario assumed that a pandemic flu had rendered one-third of the county ill and that suitable medications and vaccines were unavailable.

The exercise tested the county's pandemic flu plan, surge capacity of area hospitals and the ability of participation to continue, despite mock staff shortages.

This was the fourth year that the state supported the exercise, said Carol Ann Sperry, director of emergency nursing at BWMC. But it was "the first time that all Anne Arundel County entities participated in a coordinated fashion," she added, "[which] allowed us to test our coordination and communication."

Areas tested included interoperable communications; health and medical facilities' personnel, equipment and supplies; mass fatality response; special needs populations; and personal and community preparedness.

In addition to BWMC, agencies involved in the exercise were the Anne Arundel Medical Center, the Anne Arundel County Department of Health and the county Office of Emergency Management. For its part, Fort Meade conducted a table top exercise to evaluate notification procedures, and test and evaluate family assistance requirements.

"Fort Meade is a key player in the county," Sperry said. "By providing volunteers, Fort Meade helped us test our medical surge plans. It also allowed us to test patient tracking, which would be crucial in such an event."

More than 30 million people worldwide — including about 675,000 Americans — died during the "Great Pandemic" of 1918-1919. Other outbreaks occurred in 1957 and 1968.

Though not in the United States yet, the Avian (or bird) flu has recently been confirmed in several Asian countries.

Preparing for a pandemic

Fort Meade Public Affairs Office

The recent community-wide pandemic flu exercise was just that — an exercise. But what if there really were a pandemic flu in our area?

Don't think it can't happen. It can and it did. In the Great Influenza Pandemic of 1918, for instance, more than 1,000 Marylanders — including many at Fort Meade, known then as Camp Meade — were infected; 169 died in one day. Other confirmed influenza outbreaks occured in 1957 and 1968.

Would you know what to do if a pandemic flu were to strike again? Would you and your family be prepared?

Items to consider if there were an outbreak in our area:

- **Social disruption may be widespread:** plan for the possibility that services at health care facilities, grocery stores and banks may be disrupted.

PHOTO COURTESY OFFICE OF THE PUBLIC HEALTH SERVICE HISTORIAN

The Great Pandemic of 1918-19 resulted in more than 675,000 fatalities. When it came to treating influenza patients, doctors, nurses and druggists were at a loss.

- **Working may be difficult or impossible:** find out if you can work from home.
- **Schools may be closed for an extended period of time:** plan home-learning activities and exercises.
- **Transportation services may be disrupted:** consider alternate ways to get to work.

Families should also stock a supply of water and food in the event of a pandemic flu outbreak. Items to keep on hand include nonperishables such as canned goods, protein bars, peanut butter, crackers and bottled water.

Also remember to stock non-food items such as soap and water, batteries, garbage bags and toilet paper. Store a two-week supply of water and food, and periodically check prescription drugs to ensure you won't run out.

For more information, visit www.pandemicflu.gov. The Centers for Disease Control hotline operates 24 hours a day, seven days a week at 1-800-232-3646.

Appendix D: Acronyms

Acronyms used throughout the document.

Appendix D: Acronyms

After Action Report	AAR
Assistant Secretary for Preparedness and Response	ASPR
Centers for Disease Control and Prevention	CDC
Community Emergency Response Teams	CERT
Critical Infra-structure, Key Resources and Critical Manufacturing	CI/KR/CM
Department of Homeland Security	DHS
Emergency Action Plan	EAP
Emergency Management Agency	EMA
Emergency Medical Dispatch	EMD
Emergency Operations Center	EOC
Emergency Medical Service	EMS
Emergency System for Advance Registration of Volunteer Health Professionals	ESAR-VHP
Exercise Evaluation Guides	EEG
Facilities Resource Emergency Database	FRED
Homeland Security Exercise and Evaluation Program	HSEEP
Hospital Preparedness Program	HPP
Incident Action Plan	IAP
Incident Command System	ICS
Local Health Department	LDH
Maryland Department of Health and Mental Hygiene	DHMH
Maryland Institute of Emergency Medical Services System	MIEMSS
Multi-Agency Coordination Center	MACC
Observer-Evaluator-Controllers	OEC
Office of Preparedness and Response	OP&R
Public Health Emergency Preparedness	PHEP
Receipt, Stage, and Store Facility	RSS
Standard Operating Procedure	SOP
Strategic National Stockpile	SNS
Target Capabilities List	TCL

Universal Task List	UTL
US Department of Health and Human Services	HHS